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Do you *ever* need to buy a full-priced program again – or does PD have all the answers?...PAGE 104

COVER DISK No.1

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PUBLIC DOMAIN COVER DISK 1

AMIGA
Car: Formula one from your Amiga
Calckey: Instant pop-up calculator
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Frak: 3D block stacking game
Booklet: Turns text files into booklets
Backscroll • Sdir Whereis • Browse

ST
Tennis: Beat Bjorn Borg at his own game!
Noisetracker: Music composer
Grafitti: Scrawl across your desktop

Program packed disk. Quick – turn to pages 6, 7 & 8 for details!

Tri-format disk © Rob Northen Computing

What no cover disk?
Why not ask the nice person behind the counter whether they are keeping it safe for you!

FULL DETAILS OF DISK ON PAGES 6-8

VANDALS!

Are the hackers, crackers and pirates ruining PD?

...TURN TO PAGE 74

INSTANT SOFTWARE

Get PD down the line

...PAGE 38

SOMETHING FOR NOTHING

Find out what public domain has to offer you

... PAGE 30

WIN A PRINTER PAGE 100

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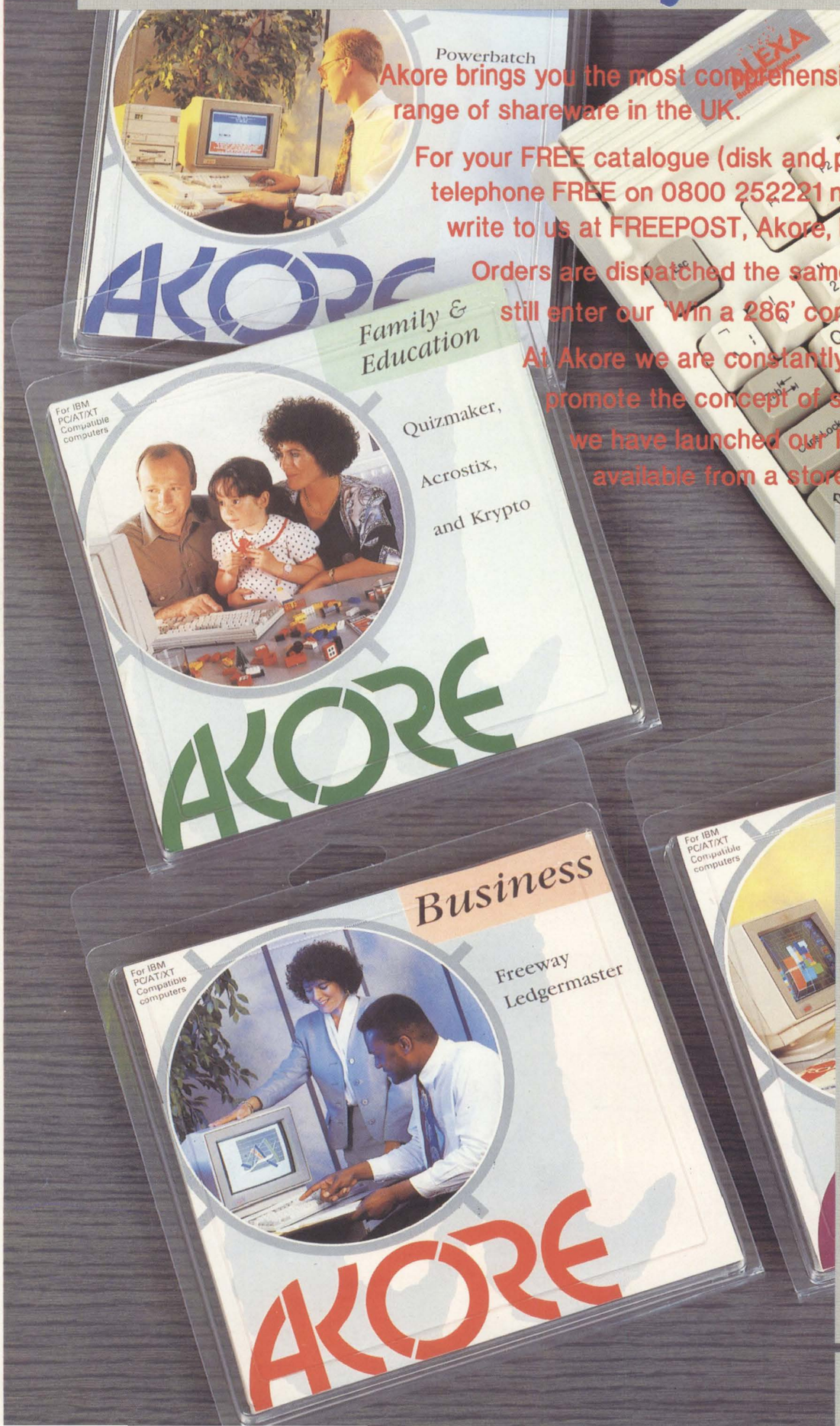

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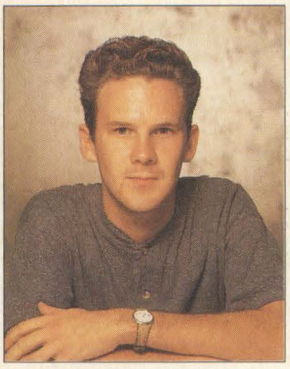
PUBLIC DOMAIN



Welcome to the very first issue of *Public Domain*!

Public domain software has always been thought of cheap and cheerful, inferior to full-priced commercially available products. That isn't necessarily the case. There's plenty of really good software out there – and all for free!

The problem is finding it! There are literally thousands of PD programs available, and finding the best program for your needs can be a fruitless and frustrating experience!

That's where we come in. We will review and rate hundreds of programs in each packed issue of *Public Domain*. There simply isn't a more comprehensive guide to public domain software around!

Whatever it is you're after, you're bound to find it in the public domain. And if it's in the public domain, you'll find it in *Public Domain*!

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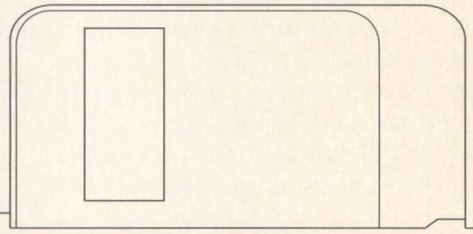
Find what you need quickly and easily.

PUBLIC DOMAIN COVERDISK

Free with each and every issue of *Public Domain* is a disk jam-packed with programs for your machine. The disk uses a special format that allows it to store Amiga, PC and ST programs. So whatever machine you own, there's something on it for you!



Got an Amiga? ..... Turn to page 6.....

- Put the pedal to the metal and burn some rubber with *Car*, the superb racing game!
- No need to hunt around for your calculator. *Calckey* sums it up at a keystroke.
- Create your very own customised calendars with *Calender Factory*.

Got a PC? ..... Turn to page 7.....

- Fast, furious, and frantic! Block building fun with *Frac*, the 3D reflex game.
- Turn those boring text files into a novel. *Booklet* creates the A5 books for you.
- *Sdir* makes your directories friendly.
- *Backscroll* remembers your MSDOS commands.
- Find those elusive files with *Whereis*.
- Make reading DOC files fun again with *Browse*.

Got an ST? ..... Turn to page 8.....

- It's game, set and match with *Tennis*, the 'smashing' sports sim!
- 'Killroy was 'ere!' Put away your aerosoles and vandalise your desktop with *Graffiti*.
- On a different note... Make music with *Noisetracker*. Sounds good!

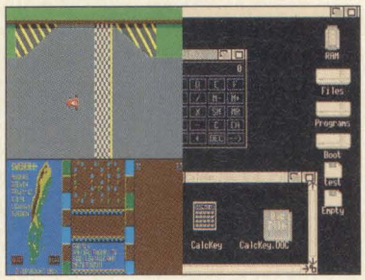
Getting Started

Before you attempt to use any of the programs on the PD cover disk, we strongly advise you to make a back-up copy. Here's what to do:

1. Turn on your Amiga and insert your Workbench disk into the internal drive.
2. Take a blank disk and initialise it (instructions in your owners' manual).
3. Now enter the CLI (Command Line Interface) by double clicking on the CLI icon that is in your system drawer.
4. Now enter the following command to set things up – `COPY C:MAKEDIR|COPY|INSTALL RAM: PATH RAM: ADD MAKEDIR RAM:PD`
5. Now remove your Workbench disk and insert your cover disk into the internal drive. Enter the following command – `COPY DF0: ALL RAM:PD`
6. Once all the files have been copied, remove your cover disk and insert your blank disk in the internal drive. Enter the following command – `COPY RAM:PD ALL DF0:`
7. Once all the files have been copied, enter the following – `INSTALL DF0:`
8. You will now have a bootable copy of the PD cover disk.

Car (PD)

If you fancy yourself as something of a boy racer, then you can prove your skills behind the wheel with this brilliant car racing game from prolific PD programmer Anders Bjerin. Anders has produced many fine PD games, but *Car* is by far his best yet. If you've ever played something like the arcade classic *SuperSprint*, then you'll feel right at home with *Car*.



Race around the track at break-neck speeds in Anders Bjerin's brilliantly addictive *Car*.

You don't have to race other drivers, but the challenge is just as difficult. The basic idea of the game is to race around the track as fast as you possibly can, trying not to put the car into scenery while trying very hard indeed to achieve the fastest possible lap time. Problem is, though, the car you drive doesn't handle too well – in fact, it handles about as well as a supermarket shopping trolley, so you've got your work cut out for you if you are to keep the car on the road, let alone achieve record lap times. The secret is to use the skid of the car to your favour, but I'm not going to tell you how – that's up to you to find out!

The game is played using a joystick plugged into port 2 of your Amiga. If you don't have a joystick, then borrow one 'cos you'll be missing out on a real PD treat!

RUNNING CAR

First boot up your machine with Workbench in the internal drive. Replace the Workbench disk in the drive with your cover disk copy and double click on the cover disk icon. Double click on the *Car* drawer icon and then on the *Car* icon itself.

If the game refuses to load, try rebooting your machine with your disk in the internal drive. The Workbench should appear again, but you'll have a lot more memory to spare. Now try double clicking on the icon again.

AMIGA 92%

Problems?

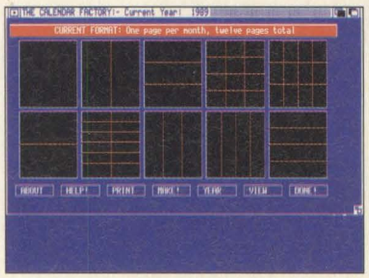
We've tested and tested all the programs on the PD cover disk over and over again until we're totally sick and tired of using them, but it would be totally impossible to be sure that all the programs work on the many different system configurations available. If you do have a problem using any of the programs, write to us at the address below and we'll try to sort things out in time for our next issue. Please don't try to call us – after all, if every reader phoned us, we'd never get the magazine written!

COVERDISK PROBLEMS, *Public Domain*, Future Publishing Ltd, 30 Monmouth Street, Bath BA1 2BW.

Calendar Factory (PD)

No prizes for guessing what this program produces! Yep, you've guessed it – calendars. Lots of 'em. Simply tell it the current year and it can produce a complete calendar in a variety of different formats. There are ten different layouts in total, all of which can be dumped to a standard A4-sized printer.

Using *Calendar Factory* is simplicity itself. All you have to do is to select the type of calendar you require by clicking on its on-screen representation. Next, click on the YEAR gadget and enter the current year in full (1991, for example – just 91 won't do). Once that's done, just click on PRINT and you'll have your ready-made calendar in moments.



You'll never miss an appointment with the *Calndar Factory* at your side.

Calendar Factory can also output calendars as straight ASCII text files. These can be very useful for importation into desktop publishing packages, allowing you to create calendars that combine high quality type with graphic images.

RUNNING CALENDAR FACTORY

Calendar Factory will only work if you boot your Amiga from your Workbench disk first. The program requires access to a number of vitally important files which can only be found on Workbench, so turn on your machine and boot-up.

To run the program, enter the *Calendar* drawer and double click on the *Calendar* icon. You're now ready to rock.

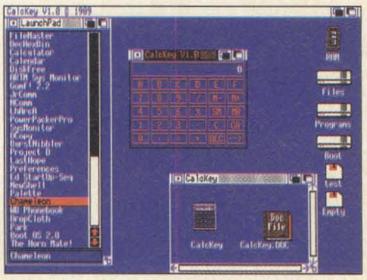
For more information, consult the program's documentation files on the cover disk.

AMIGA 82%

Calckey (Shareware)

Now here's a real gem of a program that every Amiga owner should have installed on their Workbench disk. *CalcKey* is a very useful calculator program that has one major advantage over the Workbench calculator – it runs in the background.

Once installed, you need never load *CalcKey* again (well, not until you reboot, that is). Simply by pressing ALT and + together, the *CalcKey* window will appear on the front-most screen (which won't necessarily be the Workbench).



Do numbers confuse you? Then *CalcKey* is for you – it supports hex and octal too.

Another advantage of *CalcKey* is that it fully supports not only the standard denary number system (that's the one we use is based on the number ten), but also both octal (base eight) and hex (base sixteen). This feature alone makes it a great choice for the programmer who requires a fast and efficient number base converter.

Word processor users will also find it especially useful. Believe it or not, but *CalcKey* will automatically insert the answer to any calculation that you make directly into your document at the current cursor position. Perfect for numerically illiterate writers.

RUNNING CALCKEY

CalcKey can be run by double clicking on its icon from the Workbench. Once loaded, it will display a small window containing copyright information. After a few seconds, this will disappear, leaving you to use the program.

It can be activated simply by pressing the Alt and '+' keys together. For more, consult the program's documentation.

AMIGA 84%

Getting Started

Before you attempt to run any of the programs on the Public Domain cover disk, you must first back-up your disk. Don't worry – this isn't at all complicated. If you follow the instructions below, your cover disk will be backed up in no time.

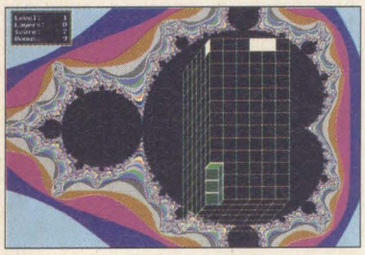
1. Format a blank disk using the MSDOS Format command and keep it safe.
2. Next, write protect your cover disk – move the tab on the back so you can see through the hole.
3. Use the XCOPY command to make the back-up. With your system disk in drive A:, enter the following command – `XCOPY A:\PC\*.* B: /W`. When prompted, insert your cover disk in drive A: and your freshly formatted disk in drive B:. If you're using a single drive system, XCOPY will treat your single drive as both A: and B:, so just follow the on-screen prompts and you won't go far wrong.
4. If you want to back up this disk to hard drive, enter the following command – `XCOPY A:\PC\*.* C:`

Frac (Shareware)

Frac is one of those games that once you start playing it, you just won't be able to stop.

It is an adaptation of Alexi Paszitnov's world renowned puzzle game classic *Tetris*. The game itself is very similar to *Tetris* apart from one major difference – *Frac* runs in 3D.

You still have to line up the blocks to form complete lines, but with *Frac* you have to think in 3D. Although the game itself is very difficult to master, it's very easy to play. As blocks drop



***Frac* isn't just a pretty face - it plays a mean game of three-dimensional *Tetris* too!**

down from the top of the screen, you must expertly position them so that they fall into place, forming solid lines. Once a complete line is formed it disappears, causing any blocks above it to drop down.

Sounds easy? Don't you believe it!

RUNNING FRAC

You need a PC with at least 256k of RAM, DOS2.0 or later and either an EGA or VGA compatible display with at least 256K of display RAM.

Still there? Good. In that case, let's get on with running the program. At the MSDOS A: prompt insert your cove disk into drive A: and type:

```
CD A:\PC\FRAC\
```

To actually get the game up and running,enter 'FRAC' and press RETURN. After a few seconds disk access, the game will load and you can get playing.

PC 90%

Booklet (Shareware)

Booklet is a superb little program which will allow you to print any ASCII text file in double-sided A5 format (or, to be more precise, filofax format). It achieves this monumental task by printing in landscape orientation, therefore enabling it to cram two sides of A5 onto a single A4 page (the type used by the vast majority of printers).

The program supports a wide range of printers including the HP LaserJet series and Epson 9 and 24 pin printers.

RUNNING BOOKLET

Booklet can be run by first entering the *Booklet* directory and then typing 'Booklet' at the command line. After a few seconds the program will load. Full documentation is included on the cover disk.

PC 84%

WhereIs (PD)

If you've ever lost a file on a hard disk or even a floppy disk, then *WhereIs* is for you. It's a clever little DOS-based program that will search any disk for a specified file. When a match is found, the program displays the program's location (including full path information).

One very nice feature of *WhereIs* is that it fully supports wildcards, therefore allowing you to search not only for individual files, but also files which match a given wildcard pattern. For example, if you had loads of documentation files scattered throughout your hard disk, just enter `WHEREIS C:*.DOC` and *WhereIs* will hunt them all down. Good eh!

RUNNING WHEREIS

WhereIs can be run by first entering the *WhereIs* directory and then typing 'WhereIs' and any parameters at the command line. Better still, copy it to your boot disk and you'll have instant access to it without having to hunt down your copy of the PD cover disk every time you wish to use it.

PC 78%

Browse (PD)

Let's not beat about the bush – the MSDOS TYPE command is pretty damned limited. But with *Browse* installed on your boot disk, you need never use it again.

As you've probably already guessed, *Browse* is a replacement for the TYPE command that gives you far more control over the text file being viewed. Instead of having to just watch the text scroll up the screen, *Browse* allows you to flick through the document in a very similar manner to a word processor. Using the arrow keys, you can scroll back and forward through the document, stopping whenever you want.

RUNNING BROWSE

If you've used the MSDOS TYPE command, then you can already use *Browse* – they are virtually identical. Just type 'BROWSE' followed by the filename of the file to be viewed and your PC will do the rest.

PC 78%

SDIR24C (PD)

The MSDOS boot disk is certainly in for a shake up this month! Not only have we scrapped the TYPE command, but the DIR commands also gets the boot. *SDir24C* is a replacement for DIR that has all the features of the original plus a few extra tricks. What's more, its output is also a lot prettier than the standard directory command.

RUNNING SDir24C

Once again, *SDir24C* can be run from our cover disk by simply entering the *SDir24C* directory and typing 'SDir24C' and the path name of the directory to be listed, but it'll feel a lot more at home on your MSDOS system disk. Use the DOS COPY command to transfer it onto your boot disk. For a full explanation of its parameters, consult its documentation file.

PC 78%

BackScroll (PD)

Back Scroll is a bi-directional scrolling utility. Once activated, *BackScroll* will buffer the screen scrolling so that you can recall – with a few simple keystrokes – data that has previously been scrolled off the screen. You can either scroll by line or by page through *BackScroll*'s buffer.

In addition, *BackScroll*'s printer commands allow you to select and print any data that is currently in the buffer. It's worth noting that *BackScroll* only supports 80 column text display modes. If you try using it on a 40 column mode or a graphics mode, strange things may start to happen.

RUNNING BACKSCROLL

Enter the *BackScroll* directory and type BACKSCRL. Once *BackScroll* is loaded, it becomes an extension to DOS and from then on it will be transparent to both the user and most programs.

cont. on p8

PC 75%

Faulty disk?

Out of the tens of thousands of disks duplicated, there's bound to be one or two that don't quite work. If you're unlucky enough to get one of these disks, then send it with an SAE to the address below for a free replacement:

Public Domain November/December Disk, Disk Copy Labs, Unit A, West March, London Road, Daventry, Northants NN4 4SA.

cont. from p7

Getting Started

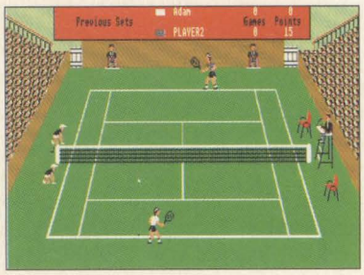
Before you attempt to use any of the programs on the PD coverdisk, we strongly advise you to make a back-up of your copy of the cover disk. Here's how:

1. Format a blank disk.
2. Write protect the original PD cover disk and insert it into the internal drive. Double click on the drive A icon and select the ST drawer icon and drag it across onto the drive B icon. If you have twin drives, then insert your blank disk into drive B and proceed.
3. If you only have a single drive, follow the on-screen dialogue boxes until the disk is successfully backed up. This will take a fair bit of disk swapping, but be patient.

Tennis (PD)

Anyone for tennis? With mouse or joystick in hand, you can challenge your ST or another player to a game of tennis without having to wear a pair of those silly shorts and arm bands.

Tennis is an ST adaptation of the classic outdoor sport of tennis that combines some great graphics with the kind of infuriatingly addictive gameplay that you'd expect from a full price commercial offering. It allows either one or two players to play on a tennis court viewed from the famous raised elevation angle that the BBC has made its own.



Wimbledon it may not be, but *Tennis* is an infuriatingly addictive game nonetheless.

The rules are identical to the real thing. The basic idea is to win the match by taking more sets than your opponent. If you don't know how to play tennis, don't worry. It's fairly simple to learn. When *Tennis* first loads, you'll be presented with an options screen which allows you to alter certain aspects of the game – the number of players, the difficulty level of the game and the controls to be used, for example.

Once you're happy with these settings, click on the START GAME option and you're away. The game can be played either with the keyboard, mouse or (best of all) a joystick. Use the directional controls to move your player around the court and press the fire (mouse) button to actually hit the ball.

RUNNING TENNIS

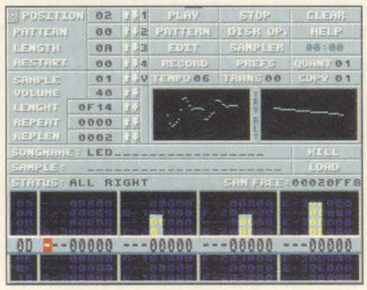
Tennis can be run by double clicking on the TENNIS.PRG icon in the Tennis folder. After a few seconds disk access, the game will have loaded. Don't forget to pack your Robinson's Barley Water!

ST 82%

Noisetracker (PD)

Everyone knows that the ST is a great machine for creating music using MIDI-compatible instruments, but the Amiga still reigns supreme when it comes to creating music using the machine's sound chip.

The ST can produce some pretty decent sounds, but without the right software your compositions will sound somewhat limited. Taking more than a few pages out of the Amiga's book is *NoiseTracker*, an ST *SoundTracker* clone that actually started its life as an Amiga program. Even on the Amiga, *NoiseTracker* is one of the best *Sound Tracker* clones available and the ST version is just as good.



Make beautiful music with your ST, a sound sampler and a copy of *NoiseTracker*.

You'll find *NoiseTracker* being used extensively by professional coders for adding the sound tracks to games and demos. Now, thanks to the miracle of PD, you too can get your hands on this fantastic music composer.

Like all *SoundTracker* clones, *NoiseTracker* is based on a system of patterns, not unlike that of a professional drum machine. Simply by defining small sections of music and stringing them together, complex arrangements can be created with ease. What's more, *NoiseTracker* is completely sample-based, so your compositions can draw on sounds from the real world grabbed using an inexpensive sound sampler.

Included on this disk is a demo song. Just load it up using the DISK OP and LOAD SONG option and you'll get a staggering demonstration of what the ST sound hardware is really capable of. This demo song also has a couple of instruments built into it, which you can use in your own compositions by deleting only the song data and leaving the sample data intact.

RUNNING NOISETRACKER

You can load *NoiseTracker* by double clicking on its icon which can be found in the NOISE_15 folder. Full documentation is included, but it's unfortunately a little brief. In reality, the best way to get to grips with *NoiseTracker* is to actually use it. It may seem a little daunting at first, but you'll be amazed just how quickly and how easily you too can create compositions that would have turned Mozart green with envy.

ST 85%

Graffiti (PD)

I've you've ever fancied yourself as something of a graffiti artist, but couldn't face the thought of being banged up for vandalism, then *Graffiti* is for you.

It's a fun little desktop accessory which allows you to scrawl across your desktop with an imaginary spray can, producing anything from the usual 'Killroy was 'ere' comments to some quite complex artwork.

Graffiti's spray can performs very similarly to the real McCoy, so you've got to be very careful not to apply too much paint in one area. If you do, it may well run, causing your latest masterpiece of street art to be reduced to a runny mess.

The best way to use *Graffiti* is to apply several light 'coats', touching up as and when the paint 'dries'. *Graffiti* also has a number of extra controls which mimic the nozzle controls of a real spray can. For example, if you hold the ALT key down, *Graffiti* applies lighter amount of paint covering a wider area which can reduce the risk of the paint running.

Unlike a real can, *Graffiti* isn't just restricted to a single colour. If you press the CONTROL key, it changes to one of the 16 colours available on the low resolution desktop (four colours for medium res).

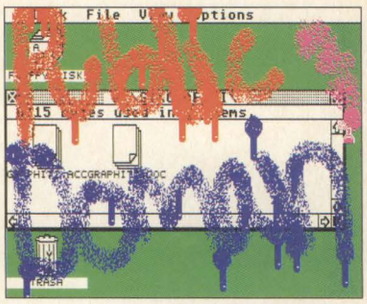
RUNNING GRAFFITI

As it stands, *Graffiti* will not run on its own. To make it run, you must copy it to the top directory of a disk and reboot from that disk. Once the desktop appears, the program itself will have already loaded. To run it, move the mouse pointer up to the desktop DESK menu and select 'Graphiti Fun' (this guy can't spell!) from the pull down menu.You're now ready to spray away! PD

ST 76%

Shareware Contributions

Please note that many of the programs on the PD coverdisk are shareware. You are therefore morally bound to pay the programmer a minimal shareware contribution if you decide to continue using their program. Full details on how to register your copy of the shareware utilities are included in the documentation files for each program. Do the decent thing.



Street art makes it to the ST. Now you too can scrawl obscenities across your desktop!

AMIGANUTS UNITED

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WORLDWIDE DISTRIBUTORS OF THE DEDICATED AMIGA CODERS CLUB DISKS
EUROPEAN DISTRIBUTOR FOR THE WORLD FAMOUS T.BAG DISKS FROM MERLIN SOFTWARE

Bug-Bash: Kill the bugs, clean up the trash in the garden. A great kids game. ...£3.00
1036: Amibase Professional II (v.1.2). The new additions to this database make it a must have. It includes a nice picture addition facility. (1 Meg) ...£3.50
877: 1 Across 2 Down. A fully fledged crossword program. (Data disk No: 1 is supplied free!) For only £5.00. Data disks 2, 3, 4 & 5 are now ready at £2.00 each.
1038: Super Amidash. Do you remember that good old Commodore 64 game Boulderdash? Well here is your chance to have that fun again. 1Meg £3.00
1068: MOD Processor V1.92. Make picture and/or music progs, adjust pic height/width. This version will load the new 8 channel octamed music and is excellent! £3.50
1075: Intuimenu. The easiest way to execute all your programs. By Nicholas Lewis .£3.00
1100: School Timetable Creator. (Print your timetable). By Keith Grant. 1Meg....£3.00
1102: The Sprite Designer. A good way to draw/save sprites. By Frank Tout £3.00

SUBSCRIBE SUBSCRIBE SUBSCRIBE SUBSCRIBE

If you would like to get hold of the Amiga Coders Club disks as soon as they are published, why not send £33.00 and ask to go on the ACC mailing list now?

We will send you each issue as soon at it's ready, (applies to issue 14 onwards).

If ordering from outside the European community, add an extra £6.00 for years postage.

Please note that issues released prior to ACC 14 must be purchased separately. (Due to V.A.T. ACC price increase is unavoidable in 1992 so subscribe now!)

If you would like to take out a year's subscription for the T.BAG disks (applies to issue 50 onward), simply send £33.00 and we will send you each issue well in advance of them becoming available from any other supplier. (Note that issues 50 to 55 are ready now and will be sent upon joining).

Issues released prior to T.BAG 50 must be purchased separately @ £2.00 each.

If ordering from a non EC Country, add extra £6.00 to cover the years postage

MASTER VIRUS KILLER V2.2

It now recognises another 27 of the little buggers, including the Virulent SHA and the destructive Disk-Validator virus.

Only £5.00

IT'S HERE AT LAST!

The complete two disk version of Mike Simpson's A-Gene.

Price: Europe £15.00 Rest of World £20.00

Get this Genealogy program now!

Note that excluding the T.BAG disks, none of the above programs are public domain. Postage: EC Countries, (inc UK), add 50p - Non EC £1.00 - Rest of World £2.00

The final 1991 catalogue update is ready, send for your copy now! Only £1.00

THE NEW (1Mb) EIGHT CHANNEL MIDI COMPATIBLE OctaMED V2 IS HERE!!

It now contains full notation, including a notation editor with notation printing, 5-7 channel modes for high quality, non-CPU stressing audio/split channels, sixteen track display for Midi use and a host of other new *MED* features.

*** V3.20 of the public domain four channel Med is also encoded into this excellent program and you can switch from 8 to 4 channels at will***

Price is £20.00 for all European countries, (£25.00 for non-European), includes V.A.T. but not postage. Payment in pounds sterling only, if ordering from overseas, send a bankers order/Eurocheque etc. (Credit card orders will not be accepted).

IMPORTANT NOTICE TO ALL REGISTERED PURCHASERS OF OctaMED V1

If you return your original Amiganuts disk, containing V1, you can have V2 for half price, (ie. £10.00 Europe). **REMEMBER**, you must return your original V1 copy.

FREE PRIZE DRAW

*** ALL PURCHASERS OF OctaMED V2 WILL BE ENTERED ***

FREE PRIZE DRAW

1st Prize: Golden Image Scanner
2nd: LCD Colour TV.
3rd: £50 of progs.

Into coding? - Want to learn? The Amiga Coders Club is for you! ACC 1-4 is the first four compressed issues of an excellent series for coders, even if you are new to the Amiga. If you want to learn Assembly, using DevPac, (or our own new ACC special assembler disk), this is the club for you! ACC 1-4 (compressed) £1.50. The Amiga Coders Club disks are packed with source, hints, tips, advice from many of the well known coders that are on the Amiga scene today. Issue numbers 5-17 are now available. Please note, (excluding the compressed introductory disk (ACC 1-4), and no. 12), the price for each issue of the ACC disks is only £3.00. ACC 12 is our birthday issue, it is a 2 disk set, and therefore the price is £6.00. Amiga Coders Club Special! Here is a low priced assembler package for all you coders out there in Amigaland. (See reviews in the Amiga magazines) £5.00

BANNED!

Atari fury over PD piracy

Atari has come down heavily on PD libraries, ordering the immediate withdrawal of its products that have 'found' their way into some libraries' books.

The company contacted about 30 public domain libraries with a strongly-worded letter telling them to stop duplicating certain Atari-owned titles. It warned that Atari; "would not hesitate in taking action against individuals or companies found to be illegally distributing software products."

The crackdown includes the popular art package *NeoChrome*. This has been available from PD libraries for years, yet many of the versions floating around were never 'officially' PD. Only the first two releases, versions 0.5 and 0.6 were released into the public domain. Any later versions of the program are not PD.

Atari was also angered that a later version of *NeoChrome* has been hacked and put back on to the PD circuit as *NeoChrome Master*. While this version undoubtedly adds may useful commands to the program, Atari still owns the copyright – something the modified version deliberately neglects to mention.

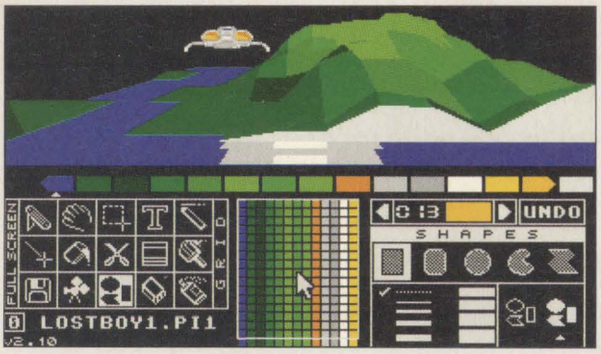
But what really prompted Atari's action was seeing the game *Joust* advertised and reviewed in computer magazines as public domain. As Atari software manager Robert Katz explains: "The thing that broke the camel's back, if you like, was the fact that we were seeing software that we were offering a customer being promoted by the PD libraries. These are games that we're still talking to people about putting on budget labels or as part of compilations."

There is no danger of programs that Atari has genuinely placed in the public domain being withdrawn, though. Katz says: "In fact I have some additional stuff that we will be placing in the public domain fairly soon. There's a diagnostics program that we've commissioned to help owners identify computer problems."

Neither does Atari have any immediate plans to clamp down on public domain software that resembles Atari's games in look and feel, though it is something being looked at. "The problem is you can either take the American approach where you engage in litigation for anything, or you can take a more sensible approach. We need to decide whether to take any action or not," said Katz. "The concept of public domain is one that we absolutely and totally support. The bugbear is where PD libraries take software that is available commercially, however old, and put it into their collections."

Library proprietors worried about whether a piece of Atari software is legitimate or not should write to Robert Katz at Atari. They will be sent a list of the company's copyrighted products, put on a mailing list and kept up to date with any future developments.

Contact:
Atari UK, Atari House, Railway Terrace, Slough, Berkshire SL2 5BZ ☎ 0753 533344.



NeoChrome is one of the programs affected by Atari's action. It was never PD in the first place, but Atari is monitoring libraries a lot more closely now.

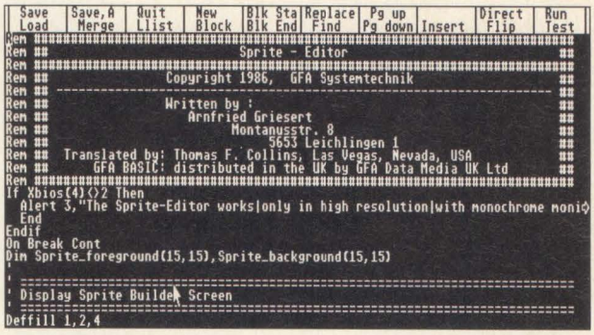
Back to BASIC

ST users on the lookout for a better version of the BASIC programming language can pick one up at PD prices.

GFA BASIC version 2 is available through selected PD libraries for little more than the price of a disk. The program is licenceware rather than PD, so must be obtained through official sources.

Users impressed by the program's speed and usability can purchase a compiler and manual for the program for just £20. The language originally sold for £80, but has now been superseded by the latest incarnation, *GFA 3.6*. This latest version boasts more than 250 additional commands, as well as being significantly faster.

Riverdene is one of the officially licensed libraries and is selling the language for £3. Riverdene can be contacted on 0734 452416. GFA is on 0734 794941.



Write brilliant BASIC programs with GFA. The standard version is available as licenceware, and GFA hopes it will tempt you splash out on the full thing.

Going for goal

Fans of the classic soccer game *Kick Off 2* will be able to relive their greatest moments for eternity. A football fanatic is compiling a disk full of great goals so that others can view the spectacular shots by loading them into their computers.

What a scorcher! Relive those magic moments again and again (and again!)

The idea is to create a series of the most amazing goals scored in *Kick Off 2*, whether it's the best, silliest or most entertaining.

Derek Doran is the man behind the scheme. If you'd like your glorious goals to be included in the compilation then send them to him at 3 Glenaulin Park, Chapelizod, Dublin 20, Eire. If you'd like your disk returned, please ensure you enclose a 50p piece for return postage.

The Goalden Disks will be released into the public domain just as soon as they've been compiled. Check out your friendly neighbourhood libraries for details, rather than Derek, who will not be distributing the disks himself.

MAIN NEWS → PUBLIC DOMAIN NEWS → PUBLIC DOMAI

All Formats Fair

The All Formats Computer Fairs have no pretensions. If you want to see the spankiest shoot-'em-up from US Gold, or the latest in spreadsheets from Lotus then stay away. But if you're one for a bargain, then this is the venue for you!

The All Formats Fairs may not be the most glamorous of events, but there's a bargain to be had for all.

The fairs are held on a regular basis, are local – events appear all over the country – and are, above all cheap! There's always a bargain to be had and there'll be plenty of PD libraries from which to pick up the latest disks. And what's more, there are another six events from now 'til the end of the year. The dates are:

October 6	West	The Brunel Centre, Bristol Old Station
November 3	London	Royal Horticultural Hall, Greycoat St, (Victoria tube)
November 10	Midlands	National Motorcycle Museum, Junction 6, M42
December 1	Scotland	City Hall, Candleriggs, Glasgow
December 14	London	Royal Horticultural Hall, Greycoat St, (Victoria tube)
December 15	Leeds	University of Leeds, Sports Centre, Calvery St

Stands are cheap too, so it's the ideal place for PD libraries operating on a tight budget to sell their wares. To book a stand or buy a ticket call John Riding ☎ 0225 868100.
There is an All Formats Computer Fair newsline service, ☎ 0898 299389, for those with pockets-full of 10p pieces.

Shareware in the shops

Akore, supplier of shareware on all three 16-bit formats, has recently started to supply shareware into shops.

The range consists of 36 titles initially, spread over four separate divisions. There are sections for business, programming and utilities, games and family and education.

This retail range of shareware will be available from selected suppliers nationwide. They will be packaged and accompanied by point-of-sale material. The pack prices start at £4.99, but vary depending of the number of disks in the pack.

Akore will, of course, continue to supply the software through it's mail order service. You can write or call Akore free: Akore Shareware, FREEPOST, Nottingham NG1 1BR ☎ 0800 252221.

If the libraries are united

Four leading PD libraries have banded together to form a voluntary body which, its members hope, will evolve to act as an independent governing body for the public domain.

United Public Domain Suppliers (UPDS) currently comprises Blitterchips, NBS Start And Valley PD and is inviting other members to join. The aim of the group is to give PD purchasers peace of mind when sending away for disks. The aim is that by ordering from a member of the UPDS, customers will be assured of a good and prompt service.

"There must be dozens of small libraries that have disappeared or gone bust in the last year," says Paul Ciupek of NBS. "More often than not it's the customers that suffer most."

Steve Whitehead of Blitterchips adds: "Hopefully the UPDS will be the start of a proper independent governing body, maybe similar to ELSPA for commercial Software."

Libraries can only join if they fulfil certain criteria:

- **They must have been operating for at least a year.**
- **They must be VAT registered.**
- **They must be charging a reasonable price.**
- **They must not supply pornographic software.**

All libraries remain totally independent, but being a member of the UPDS should, the group hopes, give them a better standing in the public's perception.

Go to the show

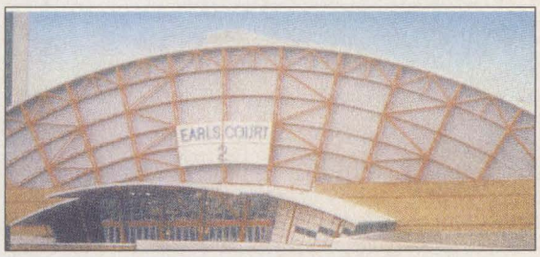
A brand new computer show will be opening its doors to the public this Autumn. Jointly sponsored by Commodore and our sister magazine *Amiga Format*, the show will have plenty of goodies to offer the Amiga buff.

The venue for the show is the brand new Earls Court II exhibition centre. Admission is £6 for adults and £4 for under-14s. Pre-registering will save a further pound (and 5p!) off the admission price. (See the advert on page 94 of this issue for details.) It's open to the public for three days:

Fri November 15 and Sat 16, 9am-5.30pm
Sunday November 17, 9am-4pm.

A trade-only day, sponsored by industry magazine *Computer Trade Weekly* will be held on November 14.

Public Domain will, of course, be there! Come and see us at the Future Publishing stand on November 15. You can't miss it – it's the big posh one just as soon as you walk through the main doors.



The World of Commodore Show is at Earls Court II soon. Don't miss it!

Commodore shows its newest stuff

- **Games arcade**
- **Play the big Christmas releases**
- **CDTV City**
- **Christmas shopping mall**
- **Meet the magazines**
- **Latest technology from top US companies**
- **Programmers tell you how it's done**

AMIGA FORMAT presents
World of Commodore
15 - 17 November 1991
Commodore

Conditions
1. Only one voucher per entrant. 2. Photocopies of this voucher will not be accepted. 3. The organiser reserves the right to refuse entry.

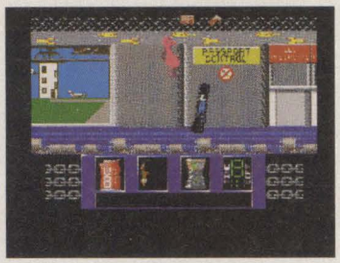
75P off entry to the 1991 World of Commodore Show with Public Domain!

Earls Court 2, London 15-17 November 1991 9am-5.30pm Friday and Saturday 9am-4pm Sunday

cont. on p12

cont. from p11

Addware



Play top quality games for free and win a prize for your trouble. Too good to be true?

A new concept in public domain software is threatening to rock the leisure software industry by providing games of commercial quality entirely for free.

A new company, Addware, is to produce high-standard games software that will be available absolutely free from public domain libraries and bulletin boards. Sending a blank disk and a SAE directly to the firm will also get you a copy of the games.

Voluntary registration will entitle games players to enter a competition with valuable prizes up for grabs. There will be a charge for registration, though, and the company hopes to raise enough money through this to fund the development of the games and to provide prizes.

For more details, turn to page 60 where all is revealed.

Let's go Crazy

PD supplier Crazy Joe's is celebrating its second birthday at the start of November and will mark the occasion by giving away plenty of goodies.

All catalogue disks supplied in the month of October will contain details of how to enter the competition. It's based on correctly identifying digitised pictures from films.

The winners will be drawn on Crazy Joe's birthday, November 1, so all entries must have arrived in that morning's post. Crazy Joe's, 145 Effingham Street, Rotherham, South Yorkshire S65 1BL. ☎ 0709 829286

I've heard that somewhere before

The long-running AMOS Licenceware library has undergone a name change. It's now known as Déjà Vu. The change has come about to avoid confusion as the library has now opened its doors to non-AMOS programs. The library used to deal exclusively in programs written with Europress software's AMOS BASIC programing language.

All the programs provided by the library are licenceware, so must be bought directly from licensed vendors. A royalty from each program sold is paid to the programmer. The programs are only available from officially licenced libraries, or direct from: **Déjà Vu, 25 Park Road, Wigan, Lancs, WN6 7AA ☎ 0942 495261**

Public domain getting Dizzy

Budget supremo Codemasters has decided to release the PC version of *Fantasy World Dizzy* into the public domain.

The *Dizzy* games have proved to be immensely popular on 8-bit and 16-bit formats alike. Sales have reached more than 600,000 copies. However, Codemasters wasn't confident that the PC had developed a strong enough budget market to make release of the egg-shaped hero worthwhile through normal channels, but reckons the quickly expanding public domain market is an ideal way to release the game.

There is a catch though... to recoup money from the game, Codemasters is implementing a series of 0898 numbers that have to be called for information to gain access to further parts of the game. The first five minutes of play are 'free', and then the game 'freezes'. To play any further you will have to 'premium' rate phone number. A four digit 'authorisation code', supplied by the game, is typed in using the phone keypad. An access code is given which, when typed into the PC, provides access to further parts of the game.

The game is 'interrupted' after the the first 5, 15, 30 and 60 minutes. At around 34p for each call (cheap rate), solving *Fantasy World Dizzy* could prove to be an expensive business!

Codemasters' managing director David Darling says: "You only pay for the game if you like it. If you decide, after five minutes time, it's not for you then that's fine. We don't feel embarrassed about charging people money to play. We think that they should pay – that's the only way we can cover for the development of the game. We tried to work it out so that someone who plays the game extensively won't pay more than if we'd sold it through the 'normal' software channels."

It's not the first time that Codemasters has used 0898 numbers in conjunction with computer games. Helplines that provide partial solutions to games have been used extensively by the company, and have proved to a very lucrative offshoot.

The good news is that Codemasters plans to release more PC games into the public domain. The bad news is that it will be restricted only to the PC format – Codemasters has set up highly efficient ST and Amiga retail distribution for those formats.

Play *Fantasy World Dizzy* for free? Well, not quite. It's public domain, but 0898 numbers need to be rung to play.

Talk to us! Talk to us! Talk to us! Talk to us! Talk to us! Talk to us! Talk to us!

Do you run a public domain or shareware library? Or perhaps you're the system operator of a bulletin board. If so, we'd like to know everything about you.

We've tried to get in touch with as many libraries as we can, but if you haven't heard from us, then we'd like to hear from you. Send us your details, tell us a little about your library, and include a catalogue – preferably printed, but a disk will do.

Public Domain aims to review and rate all the latest and greatest in PD and shareware every issue, so we need those programs to look at. Any disks submitted should be clearly marked with the disk title and code number, the machine it runs on and preferably program category.

Send your details and disks to: *Public Domian*, Future Publishing, 30 Monmouth Street, Bath BA1 2BW

PD

Budbrain Megademo | Megaball | Oh no ! Its Bart !! | SID Directory util | Silents slideshow | TV Graphics | Tobias Richter Slides | The No.1 Choice ! | IFF Slides

TOP TEN DEMOS

862 VIRTUAL WORLDS
861 INSPIRATION NONE
871 ALPHA OMEGA
779 ECES DEMO
865 PLASMUTEX
707 ENIGMA
164 MENTAL HANGOVER
599 BUDBRAIN 2
869 AMEGA MUSIC WINNERS
808 GLOBAL TRASH

START

TOP TEN UTILITIES

377 NORTH C COMPILER
378-379-380 C MAMAUL
939 TEXTPLUS 3.0
824 DEMOLISHER UTILS
592 WORDWRIGHT
593 BANKIN
568 RSI DEMO MAKER
496 VISICALC
495 RIM
730 PRINTER DRIVER UTIL

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All Artwork and design @ **START** 1991. Contact our art department on 091 565 2506

DEMOS

DEMO OF THE MONTH: DIGITAL INNOVATION BY ANARCHY This one is brilliant anarchy have really got one hell of a demo here, great music by Nuke, along with some superb routines from different parts of the world !

160-161-162 ALCATRAZ MEGADEMO Huge megademo lots of different part to it !
1002 AMOS 3D DEMO Shows you some of the effects that are possible. Great !
862 ANARCHY INSPIRATION IS NONE Brilliant demo with superb ray traced Gfx
416 ANARCHY Phantasmagoria, superb demo with excellent music. & More
646 ANARCHY MADNESS II Demo with Bobs and Filled Vectors, superb music!.
645 ANARCHY SYSTEM VIOLATION Classy demo - Vector Bob Gfx Cool Music.
599 BUDBRAIN II Hilarious megademo, house music video and cartoon sketches
426 COOL FRIDGE A plasma megademo, if you like these FX get this one.
257 CRIONICS MEGADEMO Includes the superb maddona demo and more !
426 CRIONICS NEVERWHERE Superb Real world demo and Madonna pics
834 CRIONICS TOTAL DESTRUCION Very nice plasma Fx plus a kicklin music track
545 CRUSADERS SPACE DELIRIA Fantastic music & great effects.
548 CRYPTOBURNERS HUNT FOR OCTOBER Lovely filled vector demo.
643 CRYPTOBURNERS 3D Get out your 3D glasses for this one its mega !
261 CRYPTOBURNERS MEGADEMO 2 Excellent effects and music
581 CRYPTIC A-Z twenty six demos and intros crammed onto one disk
534 DEEP SEA Tasty demo by the Intuition guys. Lovely bobbly music track
453 E P I C Incredble preview to a new game by Ocean, Filled vectors. 1 Meg
611 FARTS AND BELCHES Is this for real ... Sampled farts. Well ...
615 FRACTALMANIA Collection of Fractal demos, picutres and more.
136 FRAXION "REVENGE" Cartoon style horror video recorder ! Very funny !
546 FRAXION FUTURE VISIONS Superb Aliens-type intro plus great pictures
833 GOLDFIRE OBLIQUE INFINITY Nice megademo with acid style video
602 HORIZEN SLEEPING BAG Multipart demo with vectors & funky music.
607 IRAQ DEMO Amusing demo of Saddam meeting President Bush ...Kaboom !
149 150 KEFRENS MEGADEMO VIII Some kickin' demos and some cool music
789 KEFRENS THE WALL A great demo from the kefrens group of coders.
983 884 KGB MEGADEMO (2) great ! A great house music video & vector drums.
582 - 583 MAX OVERDRIVE Plenty of filled vector stuff with impressive music
647 MAGNETIC FIELDS HYSTERESIS Excellent vector graphics, plus music !
867 868 MAGNETIC FIELDS SPACED OUT (2) Music disk with some good tracks
732 PHENOMENA DEVIOUS DISASTER Demo with Great effects and brill music
779 PHENOMENA ECES A very good demo with a light sourced filled vector !!
693 PHENOMENA INTERSPACE Is time Linear ? Well get this demo and find out
??? PHENOMENA JOYRIDE A superb new demo by Phenomena. Wicked music tra
865 PLASMUTEX Kickin SoulISoul music beats plus copper and plasma FX !
871 PMC ALPHA OMEGA Absolutely superb filled vector demo. Lovely music !
788 QUARTEX SUBSTANCE Superb demo one of those you simply must have !
151 REBELS COMA This one is a classic ! Best Acid style video on Amiga !
652 REBELS SNAP A nice demo with spooky style music track, Popular still.
258 REBELS CANDYLAND includes one of my faves Silents Blue House !!!
152 RED SECTOR CeBIT 90 An old classic filled vector demo, lovely music
175 176 RED SECTOR MEGADEMO (2) Still stood the test of time, very good !
164 SCOOPEX MENTAL HANGOVER One of the best demos of all time. get it!!
111 SCOOPEX SEVEN SINS An old demo but some great music to back It
543 SCOOPEX CROMNIS Superb demo with great graphics and music.
550 SCOOPEX GLORY STARS A superb demo plus some other classics.
723 SHINING VECTOR EXTERMINATOR Exellent demo, incredible new effects.
440 SILENTS TROPICAL SUNSET Superb Music, Nice FX but short. +++
808 SILENTS GLOBAL TRASH This is a MUST for all Amiga demo freaks. Mega !!!!
863 SILENTS ICE Latest demo from the Silents. Brilliant music tracks !
251 SILENTS MEGADEMO Old but still up to scratch, vectors and music !
790 SIMPSONS BY DECAY With superb animation and a great funky music beat
799 SIMPSONS EQUINOX Plenty of the song & pics of our favorite hero Bart !
807 SIMPSONS FREEHAND Slideshow with a funky little Bart Simpson soundt
109/110 START DEMOPACK Contains som eold but great demos by Silents/NStar.
498 THE JCS Very weird music and visual effects. Interesting ...
254 TOMSOFT TRIP TO MARS A very good 3D filled vector trip to mars
862 TOMSOFT VIRTUAL WORLDS An absolute Epic ! Best demo of the year !!!!
610 TRIPLE TROUBLE Brilliant plasma and copper fx with funky music track !
497 WILD COPPER Old but,I still think a very good demo on all accounts
394 UNIVERSAL PICTURES Very impressive filled vector demo in space. ++++
107 VANGELIS DEMO Great music & superb colour cycled graphics. 1mg.
VECTRA SINKING DEMAND Really good filled vector demo.

GAMES

689 7 TILES Superb Speedball type game. A must for your collection !!!!!
156 157 ALL NEW STAR TREK A very popular game by Tobias Richter. Great !
761 ASI GAMES I Tanx, Rollerpede, Cave Runner, Amigoids, Avatris. Get this !
828 ASI GAMES II Galaxions, Invaders, Missile Command, Think Ahead BRILL !
913 ASI GAMES III Drip. Megaball Two cracking games. Drip needs 1 Meg
932 ASI GAMES IV Frogger, GoMUKO, Cracker, Jumpy, Duel, Klondyke.
??? ASI GAMES DISKS 5, 6 & 7 Now in Stock Call us now for details !!!
777 BOARD GAMES Some more classics: Mastermind, Othello, and Reversi.
598 BATTLE FORCE A very good strategy game between robots ! All in Hi-Res.
??? BLIZZARD A fab Scrolling shoot em up game fast action and good GFX
446 BIONIX A very dramatic introduction to this very well done Shoot Em Up
596 COLOSSAL ADVENTURE text adventure, also World Adventure and larn ++++
826 CHESS, BILLIARDS, DRIP and Nakamoto, a nice collection of varied games
922 CHINESE CHECKERS I couldnt work this one out ! A Checkers type game
924 DRAGON CAVE A dungeon master clone, great graphics and good gameplay
472 ED-209 Shoot em up blast Turtles etc. Please note some bad language.
567 FRANTIC FREDDIE Superb platform game converted from the old C-64.
674 GAMES GALORE 1 Drip tiles Quix O&X's Invaders Chess Yatzee Othello
675 GAMES GALORE 2 Wellnix Skyfight Bounce Jackland LArn Bluemoon - Great
676 GAMES GALORE 3 Gravatak Asteroids PingPong MiniBlast Orbit3D
677 GAMES GALORE 4 Mr Munk Diplomacy Car Mutant Chess EygyptRun
678 GAMES GALORE 5 Cosmo Cat&Mouse Mazeman Rollon Trivia Pharoah
679 GAMES GALORE 6 Tint Jumpy Ist ATC C-Robots SinLine King Rats BB
925 GRIDRUNNER by MENTAL IMAGE includes invaders and more ! Superb.
921 GROWTH this is a great shootemup stop the brain from growing !!
276 HOLY GRAL ADVENTURE A classic text adventure. +++
972 HOLLYWOOD TRIVIA Another great trivia game, this time on hollywood.
780 LAZERZONE This is a great shootem up coverted from the old 64 days
509 LEARN AND PLAY 1 Blackboard Maths, colorpad, Worm, Cat&Mouse, Shark.
510 LEARN AND PLAY 2 StepStone, Wheel of Fortune, Flower, Tug, SpellQuiz.
949 LLAMATRON Brilliant shareware game from Jeff Minter, send him a fiver!
820 MECHFORCE Strategy war game between robots. A very popular disk.
799 MEGABALL Definately the best breakout game of the moment ! Get this !
950 METAGALACTIC LLAMAS Amiga version of old Jeff Minter game. Pretty good
994 MONOPOLY Just like the old board game, but now on your Amiga
962 MOONBASE A thrust type game, where you must get back to your moonbase.
639 MOIRA Text Adventure based around the Dungeons and dragons theme.
762 763 NETHACK Dungeons and dragons, a good game, very detailed gameplay
714 NU Shoot em up game, very difficult, but with good graphics
448 PACMAN 87 The old classic pacman game also contains Retaliator & Sorry.
840 POM POM GUNNER Arcade game where you must shoot down planes. great f
1000 PD SHOOTEMUPS Air Ace, Middle east madness, and drive wars.
734 R.A.I.D. Shoot em up game similar to SWIV but not as good. Nice Gfx
728 S.W.I.V. Playable level of the fantastic Helicopter Blast Em Up game
923 SEALANCE A strategic submarine simulation game. Very good. See reviews.
733 SERENE Nice blasting shoot em up game. Done in SEUCK, Great graphics
471 ST BASH Space invader clone, taking the mick out of the Atari ST ++
669 SUBCULTURE 1st level playable preview of a great shoot em up game.
626 THE EVIL DEAD GAME Splatt evil dead people over your living room +++
571 TREASURE ISLAND Help the pirate find his lost that treasure.
951 TRAIN CONSTUCTION KIT, One for the kids, build your own railway.
831 TALKING COLORING BOOK Great for kids, this program actually speaks !
927 TREK TRIVIA Just for Star trek freaks, stacks of trivia questions
703 WACKO IN WONDERLAND Fantastic preview of a new platform game
704 WIZYS QUEST Great platform based arcade adventure game from Germany.
971 WONDERSOFT GAMES Golf, Cong, Missile, Trillion, Windmill, Concentrate.
701 - 702 US STAR TREK A Strategy game where you pilot the USS Enterprise
273 XENON III, TETRIS METALLICA plus some more games on this disk +++

MUSIC

242 100 GREATEST 64 TUNES Over 100 classic 64 tunes imortalised on the Amiga
938 ALCATRAZ 'THE POWER' Excellent re-mix of the song by the band Snap.
616 ALCATRAZ SOUNDS OF ENERGY Four Great house music tracks. Worth a list
835 836 837 AMAZING TUNES II (3) This ones a biggy loads of music by SAE.
869 AMEGA PARTY WINNERS Four EXCELLENT songs WINNERS OF A COMP.
628 AMIGADEUS CLASSICAL Superb renditions of Eine Kleiner etc.Rob Baxter.
531 ANARCHY CAPTURED IMAGINATION very nicely presented music by 4-Mat / Anarchy
544 BANGING BEATS Yeah ! Pump up the music, kickin remix of some house trax
245 BEAST SONIX Scoopex present the music from Beast I, all tunes.
889 BEATMASTER I LOVE TECHNOLOGY If you like rave. Get this one
688 BEATMASTER 808 STATE Cubik and more from the group 808 State.
757 BLAH BLAH EXTRA Lots of Chris Huelsbeck music crammed on one disk.
783 BRUNO'S MUSICBOX II Plenty of really Funky music with jazz influences.
??? BRUNO'S MUSICBOX III The latest superb music from the superb Bruno!
531 CAPTURED IMAGINATION Some very impressive music by 4-Mat / Anarchy
429 DJ LEIR DISCO 2 Four great House tracks. Beathoven and more. +++
569 D-MOB MUSIC 3 A Great quality house music re-mix.
894 DRUMS + PIPES Some well written music packed onto this disk.
569 D-MOB MUSIC 3 Really good quality remix of house and dance music. +++
220 221 D-MOB MUSIC 4 (2) PopMusic, PumpUpTheJam & more house tracks
186 DIGITAL CONCERT 2 Thirteen minutes of music, Doctor'in the house & more
223 DIGITAL CONCERT 3 Another house music re-mix Great quality - Love it !
224 DIGITAL CONCERT 4 Four songs including Got to keep on - Brilliant !!!!
225 DIGITAL CONCERT 5 The Power, Kaos, Keep Bustin, and Touch Me. Brilliant
425 DIGITAL CONCERT 6 Latest in the series, very good quality House music
810 811 812 DO THE BARTMAN (3) The Chart topping song sampled !
649 EQUAMANIA II Demo with a great dance music track and lab equalizers !
765 766 GOLDFIRE CEREBRAL DELIGHTS (2) Good music disk with Selector !
606 GENESIS PROJECT Five Great Genesis songs superbly done.
721 GROOVE IS IN THE HEART Remix of the chart topping song by Deelite ++
833 JUSTIFY MY LOVE Remix of Maddies song plus more mixed in with it. +++
227 JARRE DOCKLANDS The keyboard wizard, sampled and on your amiga. Great
218 KEFRENS JUKEBOX This ones super ! Lovely music with a Juke box Selector
896 MC-HAMMER DEMO Featuring some samples of MC Hammers recent Hit recor
878 - 881 MADONNA VOGUE (4 DISKS) Fans only, madonnas hit single digitised
869 MUSIC COMPETITION Winners from the Amega party, four BRILLIANT tracks
587 MAGNETIC FIELDS CHIP MUSIC If you want your Amiga to sound like a 64
562 MANIACS OF NOISE This is brilliant ! Great stevie wonder type music !
572 NEWTRONS MUSIC BOX Headbanger demo that beats in time to the music.
813 PAT MUSIC I Collection of fantastic ripped music, by various artists.
814 PAT MUSIC II Excellent selection of music presented by PAT.
815 PAT MUSIC III Another great collection of songs by Pat. Well cool.
650 PHENOMENA MUSIC DREAMS I Twenty wicked songs by twins of Phenomen.
??? PHENOMENA MUSIC DREAMS II Another follow up to their last super disk
286 REBELS MEGABLAST Music from the rebel latest demos including COMA +++
672 673 SILENTS BLUES HOUSE (2) A Brilliant music disk and Game. Get it !
542 SILENTS FULL POWER House it up music. Includes Remix of tricky disco.
672 - 673 SILENTS BLUES HOUSE Two disks of tangerine dream style music
245 SCOOPEX BEAST MUSIC Music Ripped from the game. Excellent ! ++++
424 SOUND OF SILENTS This is a must ! Great atmospheric Jesper Kyd music !!
991 992 STAR DREK SAMPLED (2) Amusing mickey take of Star Trek. V.Funny
222 TIMECIRCLE MUSIC Commodore 64 music on your Amiga good too ! +++
219 TECHNOTRONIC REMIXES Pump Up the Jam and Get Up - they even sing it !
529 TECHNOTRONIX REMIX All of their songs remixed into one great track !
145 THE SOUNDS OF GNOME Mahoney and Kaktus music disk. 46 great tunes.
710 TURRICAN 2 MUSIC DISK Fabulous music from the game of the same name.
770 771 VIVALDI - FOUR SEASONS (2) Superb rendition by Rob Baxter
556 VOGUE GET PACK MUSIC with some superb music by TIP of Phenomena

SOUNDTRACKERS

??? PROTRACKER 1.1B Sequencer, Sampler, editor. stacks of new functions
117 FUTURE COMPOSER Great chip music sequencer. No Fat Agnus
118 SOUNDTRACKER Probably the best PD sequencer for the Amiga !
459 JAMCRACKER Very detailed Chip/Sample sequencer plus source code
603 NOISETRACKER Later version of Soundtracker, lots more functions !!
613 STARTREKER 1.3 Eight Channel Sequencer, MIDI, AM/FM Sounds & more
692 SOUNDTRACKER 2.6 Another variation of the popular music sequencer
687 MED V3.11 Fully featured Sequencer with MIDI facilites & more
996 MED SYNTHETIC INSTRUMENTS Just like it says.
997 MED MODULES Some modules for MED check em out.
119 ST-01 SAMPLES DISK For use with most Music Sequencers ++
120 ST-02 SAMPLES DISK For use with most Music Sequencers ++
743 > 750 ST-03 to ST-10 Samples disks Order seperately. If you wish.
123 ST-91 SAMPLES DISK Compiled by Start use with most Music Sequencers
122 ST-90 SAMPLES DISK Compiled by Start use with most Music Sequencers
604 ST-92 SAMPLES DISK Drums, basses, leadsynths, chords and more
605 ST-93 SAMPLES DISK Drums, basses, leadsynths, chords and more
937 ST-80 BEAST SAMPLES Those lovely flute samples from Beast !
246 ADAM - M Music Disk with Slide,Latino,and several more good tunes
928 MODULES 1 The power, Keep bustin, Goldfire, Pure NRG, Coma, Electix
929 MODULES 2 Day off, Mystik, HipHop, Hey, Afrika, Chase HO, Bouncy
930 MODULES 3 Special, Cool, Beaty, Madonna, Jarre, Unicycle, & more !
931 MODULES 4 Dreams, Karate, Fellin good, Remix, Enjoyable
932 MODULES 5 Party, Summertime, Relax, Toxic, Vision, Kaos
933 MODULES 6 Shadow, Warriors, Back from Blue, Hacktrick & More
934 MODULES 7 Mellow, Blood Money, Disco, Groove, Hard, Dynamite & More
936 MUSIC UTILS Rippers, Mod2Ex, Modplayers and more. We use this one !

MEMORY MONSTERS

202 203 X-WING ANIM Tobias Richter Animation of the Star wars fighters
575 576 577 LOST IN SPACE This is just superb. Needs two megs
578 579 580 STRION AT KHARAA Great animation. 2 Meg
614 JUGGLER II A great follow up to the Juggler demo. 1.5 Meg +++
631 632 WALKER DEMO For those of you with Two megs, this is the original
906-911 (6 DISKS) UPGRADE This is great ! All raytraced graphics 1.5 MEG
942 943 ANTI LEMMINGS You simply must get this demo it is SUPERB. 2 Meg
[illegible]957 KNIGHT MOVES (3 DISKS) A cartoon knight animation. Good 3 Meg
[illegible] AUTOMATED LIGHT (4 DISKS) This is excellent 1 3 Meg
962 964 BUZZED (3 DISKS) (3 MEG) A huge wasp buzzing around and crashing
966 POGO This is quite good, a little cartoon animation. 1.5 MEG
967 - 969 VAUX KILLER (3 DISKS) Another of those huge animations that take

ANIMATIONS

455 AGATRON BILLIARDS,LOTUS,JET 3 Excellent animations all run in 512K
452 AGATRON ENTERPRISE DOCKING A Ray traced animation. Get it ! 1MG
458 AGATRON ENTERPRISE MANEUVERES Another superb peice. 1MG
655 AGATRON HUEY 2 A helicopter leaving a landing pad. Neat. 1MG
656 AGATRON PING-PONG Two ships passing by. Looks nice. 1MG
654 AGATRON RELIANT ATTACK A reliant attacking the enterprise. 1MG
212 AGATRON STAR TREK ANIMS Some nice looped Star trek animations. 512K
198 AGATRON THE RUN A police car chasing a lotus down a busy street. 1MG
508 BUSY BEE Ray traced, Loopy animation of a crazy bee, Ray traced
112 CX1 SPACESHIP A beautiful sculpt 4D anim of a ship circling a globe.1MG
767 ERIC-S AMY VS WALKER Cute and sexy(?) squirrel chasing a Walker. 1MG
626 ERIC-S BATMAN A great animation featuring batman and the joker. 1MG
768 ERIC-S COTOTE 2 This ones Great the old coyote up to his tricks 1.5 Meg
853 ERIC-S MORE AEROTOONS More humourous cartoon capers. Great !! 1MG
941 ERIC-S SHUTTLECOCK Two Space Shuttles playing with a satallite. 1MG
456 ERIC-S STEALTHY II The Mig-29 and Stealthy bomber cartoon. Great. 1MG
965 ERIC-S TERMINAL 4 LATE NIGHT In his usual great style ! 1 Meg ++++
103 GHOSTPOOL ANIMATION Spooky animation of a ghostly pool player potting
104 HAPPY ANIMATIONS HappyMan, TreeFrog, Windowman and Hammer. All 512
953 MAGICIAN 2 A follow up the the magician juggler, A lot better 1 MEG
175 - 176 NEWTEK DEMO REEL 3 This needs 1 Meg and 2 Drives, but its MEGA
185 PROBE SEQUENCE A Satalite is recieving messages from a distant planet.
207 LUXO TEENAGER Witty Animation with two lamps kicking a ball around. 1 667
668 LIGHT CYCLES (2) Huge animation from the Tron film. Excellent.1MG
947 - 948 LAUREL AND HARDY A great set of animations from Brazzile atkins.
901-904 REAL 3D (4) SUperb demo of the effects possible with Real 3D.1MG
474 SPACECHASE Animation of a spaceship being chased accross a deathstar
190 THE JUGGLER the old classic animation that sold hundreds of Amiga's !
192 THE WALKER DEMO Helicopter attacking the walker. Excellent. 1MG
193 THE WALKER DEMO II Walker Attacking the A2000. Not bad. 1MG
946 WINGS Animation from the game, some excellent graphics. Get it !

SLIDESHOWS

210 ADDAMS FAMILY DEMO Music and pictures from the Old TV series. Mega ! +++
685 ADVANCE HAM PICS Stunning pictures with a nice funky music beat.
158 AGATRON 6 Incredible 4096 color ray traced slideshow. Get this one !
159 AGATRON 8 Excellent HAM pictures, with some good music too. Mega !
699 AGATROM SLIDES Eight more impeccable pictures of Space stations
975 CHAINSAW SLIPPERS This one is Great, Its hilarious !
484 COLOURCYCLES Very impressive pictures all done in deluxe paint ++++
105 DIGICARS ART Incredible HAM pictures, some of the best ! have seen ++++
134 - 135 DIVINE VISIONS Good family at slideshow
191 FORGOTTON REALMS SLIDES Nice hobbit-type slides plus 2 nice Music tracks
979 GERMAN RAYTRACED a very nice collection of ray-traced slides, done by 387
JOE SLIDESHOW 1 Collection of some very well drawn art by Joe of SCX
525 NASA SLIDES 2 Slideshow of pictures of The Earth, Shuttle, etc. +++
756 NEXT PIXILIUM Collection of pictures with music to back. Good ++++
454 NIGHTBREED Yukky slideshow from the film. Music suits the pictures !
200 ROGER DEAN Pictures digitised from the famous artist. ++
139 REAL 3D SLIDESHOW Some amazing 3D sculpted pictures done in Real 3D,
977 SHERILYNN FENN Oh no ! its her again, here for you Twin peaks fennatics 137 138
SILENTS/CH 42 (2) This is superb, slides plus a great music track.
838 839 THE FABULOUS ART OF TOBIAS RICHTER Excellent Collection !
461 YABBADABBA SLIDESHOW Hey Hey Hey, its the Flintstones with Wilma & Fred
493 YAX SLIDWSHOW Nice ray-trace pictures ported from a VAX computer ++++

UTILITIES & SERIOUS

353 A68K 68000 Assembler for the amiga. Not too hot. Get devpac instead.
987 AMIBASE 3.76 One of the best Amiga databases. Search facilities and more
178 ANYLYTICALC Large spreadsheet program for the Amiga, best with 1meg.
494 ARP 1.3 Amigados replacement project, contains new libraries & more !
916 ASI LABEL PRINTERS All the best label printing programs now on one disk!
524 ASSASINS GRAFFIX UTILS Great disk full of graphics converters etc.
916 ASSASSINS BOOT UTILITIES Loads of bootblock utilities on here.
593 BANKIN A complete cheque book analysis program. Keep tabs on your money
600 C-LIGHT RAY TRACER A commercial ray tracing package. Now PD !!!!
590 CLERK Another program similar to Journal, manages your bank account.
983 COMMODORE 64 EMULATOR Emulates a C-64 complete with demos and games
622 CURSER BASIC COMPILER Just what you need to speed up basic programs
513 DIRECT ACTION Animation utility for editing animations and stuff
525 D-COPY One of the best PD copy utilities available, very easy to use.
333 DARKSTAR UTILITIES 4 JRcomm99, plus more brilliant utils
334 DARKSTAR UTILITIES 2 Another stack of superb utilities.
130 DARKSTAR UTILITIES 3 A disk full of assorted useful utilities you may need!
360 DBW A complete ray tracing program. CLI based. Programmers only !
824 DEMOLISHER UTILTIES 168 easy to use utilities, something for everyone
588 DISKMASTER 3.0 CLI Utility program, copy files, delete, format disks.
772 DYNAMITE FONT II Another popular disk. Stacks of IFF fontscreens. Great !
601 ELECTROCAD PREVIEW If your into circuit diagrams etc, try this.
844 EMULATORS DISK Contains the ATARI ST emulator and the ZX SPECTRUM
696 FAMILY HISTORY Trace back your family name using your Amiga. 1 meg
985 FULLFORCE UTILITIES 101 Utilites powerpacker, scenarymaker & more
782 HAMLAB Convert VGA PC pictures to Amiga ham mode with this utility.
460 ICONMANIA Loads of programs for icon creation & many icons!
340 JAZZBENCH A great alternative workbench much preferred by many!
589 JOURNAL A nice program designed to keep track on your finances.
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620 M-CAD Computer aided design package uses hi res mode. Good. 1 Meg.
806 MESSY-SID Easy to use PC - Amiga file transfer program, a superb utility!
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377 NORTH C 1.3 (Packed) The complete C compiler by Steve Hawtin !
807 PASCAL COMPILER Now becoming a popular language, now available on PD
821 PENDLE EUROPA MEGAUTILITIES 1 An essential collection of over 200 utilitie
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331 PENDLE EUROPA UTILITIES 6 includes copiers and more utilities
330 PENDLE EUROPA UTILITIES 7 A very popular utility collection. Try it !
930 PRINTER DRIVER GENERATOR Create your own printer drivers
591 QBASE Database program, simple to use with full search facility.
827 QED A nice easy to use text editor program ! Load, save, print and more
822 RAZOR 1911 Graphics rippers, Virus killers, Disksalv, powerpacker & more
568 RED SECTOR DEMOMAKER Create your own superb demos ! Excellent !
914 - 915 RSI DEMO MAKER EXTRAS 2 disks full of new fonts, objects,bobs etc
495 RIM DATABASE Very comprehensive relational database system. Powerful.
354 SID V1.6 Newest version of the easy to use CLI utility. Essential !
464 SOZOBAN C Another very popular C enviroment, similar to North C
694 SPECTRUM EMULATOR This is a joke .. Load tapes via your sampler
844 ST EMULATOR Run Atari ST software on your Amiga. Needs 2 drives.
939 TEXTPLUS V3.00 Probably the best shareware wordprocessor now even better
127 128 TV GRAPHICS Superb Dpaint backdrops and some great fonts.
778 VECTOR DESIGNER Design your own vectors for use with the RSI Demomake
345 346 VIDEO APPLICATIONS (2) Programs for use with genlocks & videos!
695 ULTIMATE TITLE EDITOR Customise your workbench with this great Util
496 VISICALC SPREADSHEET Simple to use spreadsheet program based on VC.
592 WORDWRITE WORDPROCESSOR Comprehensive wordpro/spellcheck.
694 ZX SPECTRUM EMULATOR Load Speccy software through a sampler !!
990 600 BUSINESS LETTERS Superb collection letters for every occasion.
988 TAROT A spooky tarot card reader for the amiga !

FISH AND CHIPS

F389 PLOT A package for making 2D and 3D plots conveniently.
F151 ICONS Loads of nifty icons for Workbench. I like the Preferences !
F159 MIDITOOLS A program for recording through the MIDI Interface
F20 AMIGA2ATARTI Source code for an Amiga to Atari ST object code.
F213 300 8 Color icons for use with the 8 color workbench program.
F225 MYMENU This program allows you to add your own workbench
F240 DIS Disassembles executeable files to 68000 assembly language
F243 PASSWORD A password protection system plus PCOPY a multitasking copier
F246 NOCLICK Stop that annoying drive from clicking with this utility
F251 DISKSALV A disk recovery program for all Amiga file systems
F263/4 SENTINAL A large ray traced animation. Requires 3 Meg
F270 TOO MUCH 3D A brill little ray traced spaceship animation
F30 BBS A BBS for the Amiga (BBS-Amiga Version 1.1).
F300 TITLEGEN A program for generating scrolling video title
F314 A68k A 68000 assembler originally written in Modula-2.
F323 CZ EDITOR A utility for editing your patches on the casio CZ series
F327 MRBACKUP A hard disk backup utility. Essential program for HD users
F332 K1 Editor for the KAWAI K1 series on keyboards
F345 VC ED A voice editor for the Yamaha 4 Operator FM synths
F356 NCOMM A popular comms package for modem user.
F362 SMOVIE Scrolls standard Amiga fonts smoothly accoss the screen
F372 MAGNETIC PAGES Create disk magazines mixed with IFF pics and text
F403 KAWAI K4 EDITOR Edit and store patches on your KAWAI synth
F404 LHARC a file compression utility, a very handy program to have.
F412 ZEROVIRUS A powerful virus killing program identifies and destroys
F418 SCREENX A program designed to rip iff screens. Very useful
F425 A-GENE Demo version of a geneology database for the Amiga
F426 CONMAN A new console device designed replace amigados
F429 SCRUB Handy little prog for spinning the drive heads for cleaning
F431 EZASM Combines parts of the "C" language with 68000 assembler
F434 TYPING TUTOR A program for gavin who works here on wednesdays
F439 DELUXECHANGER Converts binary files to assembler, basic, or C
F446 CANON BJ & POST A nifty little driver for your canon ink-jet
F492 SUPERBASE PRO 4 Demo version of the superb database system.
F495 ANYLYTICALC Latest update of this 3D Spreadsheet program.
F496 GODS Preview of the game by the Bitmap bruvvers. Really good !
F497 LEFTYMOUSE For all left handed people swaps mouse buttons around !
F499 MATLAB A fortran Package for the Amiga. Update to F267
F503 PCQ Latest update of the PCQ Pascal package for the amiga
F505 THE DATING GAME A compressed version of the Anim by Eric-S !
F508 DIRWORK Fast directory getting utility & HCC C Compiler !
F513/4 DKB TRACE Latest version of this superb Ray tracing package.
F514 QUOTES A quotation generator Scans text files for quotes !
F518 POST A Postscript interpreter the Adobe language.
F82 PANL A universal patch editor for MIDI Synths and Keyboards
F95 JOURNAL A program for recording mouse clicks for tutorials
F98 ACCESS TERMINAL PROG A sixteen color terminal program for modem usersF

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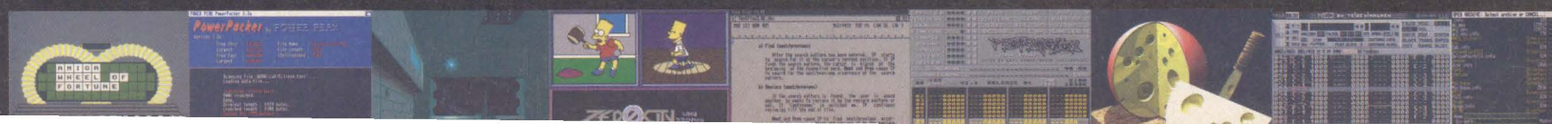

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ALT (1) Editor / calculator / address book / calendar etc.
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VGA PAINT (1) Excellent VGA graphics/drawing program
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DESKTOP PAINT (1) (HD) (EGA or Hercules) Superb B/W painting.
DESKTOP PAINT 256 (1) (HD) (640K & Super VGA) Full 256 Colour.

DESIGN

PC KEYDRAW (4) Powerful drawing & design package.
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PC DOS HELP (1) Highly rated DOS tutor/detailed refs.
PACKDISC (1) (HD) Hard disk space saver.
FLEXIBAK (1) (HD) UK hard disk back-up program.
BACK & FORTH (2) (HD) Fantastic task manager.

PROGRAMMING

PROGRAMMERS PRODUCTIVITY PACK (2) Programming tools
WINDOW BOSS (2) C tools for windows/menus/help.
C TUTOR (2) Excellent tutorial with examples.
PERSONAL C COMPILER (1) Best Shareware C compiler?
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TURBO PASCAL TUTOR (2) Very good tutorial.
P-BASIC (1) Useful interpreter, tutor & examples.

HOBBIES & INTERESTS

FAMILY TREE (1) Prints charts or book with index.
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SOLVER (1) Crossword, anagram, & word square solver.
NIGHT SKY (4) UK Pgm: planets/stars/eclipses/comets.
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FOOTBALL FORECAST (1) Popular pools/fixed odds system.
PUNTER'S PAL (1) UK horse-racing analysis program.

GAMES

SOCCER GAME (1) Get your team to the First Division.
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GET LUCKY (1) Collection of harmless (over 18's only) games.
ROCKSTAR (1) Beat sex/drugs/rock'n'roll & be a star.
SLEUTH/HANGMAN (1) Find the murderer!
CGA SCRABBLE (1) Good colour version of board game.
STAR TREK II (1) Battle with the Klingons!
CHESS GAMES (1) Gameboard, Gnuchess & Edchess.
BACK GAMMON (1) Play the computer. Mono or colour.
POWERCHESS (1) Super chess game, Hercules/CGA/EGA or VGA

EGA/VGA GAMES

VGA SHOOTING GALLERY (1) 7 shooting competitions.
EGA ARCADE (1) 6 games including Mazewar & Shuttle.
SCRABBLE (1) with expandable dictionary of words.
BASSTOUR (1) Three day Bass fishing tournament.
EGA GAMES #2 (1) 7 games including PCMAN and REFLEX
EGA MAHJONGG (1) Super graphics, can design your tiles.
EGA GAMES #3 (1) BUGFRY, BJ, LIFE3EGA.
CUNNING FOOTBALL (1) American Football simulation.
EGA GAMES #4 (1) POKER & SOLITAIRE.
EGA MONOPOLY (1) American version, superb graphics.
MILLE BORNES (1) Based on the French card game.
EGA GAMES #5 (1) 6 games including EGAWHEEL, & TRISK
DARK AGES (1) (needs 286) Supports Ad Lib/Sound Blaster cards.
GLOBAL WARFARE (1) New version of the RISK-type game.

EARLY LEARNING

HOORAY FOR HENRIETTA (1) Maths for 5 to 12 year old.
HENRIETTA'S BOOK of SPELLS (1) Spelling for age 7 to 14
AMY"S FIRST PRIMER (1) Pre-school educational games.
PC LEARNING GAMES (4) (HD) (EGA) UK Maths, Words etc. (age 2 to 8)
ANDY'S WORD GAMES (1) Improve spelling & grammer.

EDUCATION

PC TUTOR (1) Good interactive computer tutorial.
TYPING TUTORS (1) Good tutors - PC TOUCH & FASTYPE
ARCUS (4) very good UK statistical analysis program.
GCSE (1) Choose either Maths, Science, Physics or Computer Studies.
WORLD MAP 2.9 (1) Draws global maps - fascinating!
FRENCH TUTORS 1 & 2 (2) Multiple choice tests.

LIFESTYLE

HEALTH RISK APPRAISAL (1) Looks at your health.
HOROSCOPE/ASTROLOGY (1) Prints Star Chart & analysis.
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HANDWRITING ANALYST (1) Thorough graphology program.
PALMISTRY FOR ALL (3) (HD) EGA and CGA versions.

SHAREWARE FOR MICROSOFT WINDOWS

WINDOWS GAMES (1) 12 games, Poker, Yacht etc.
SCREEN PEACE (1) Set of screen saver programs.
WINDOWS ALMANAC (1) Calendar, notepad, alarm, etc.
ZIP MANAGER (1) File compression manager.
APORIA (1) Alternative user interface.
WINDOWS WALLPAPER (2) 18 pictures for your desktop.
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Public Speaking

This is where *you* come in: the letters page is where you have your say. We want to hear your views about public domain, the computer market in general, and, well, anything you like, really. We'll do our best to answer your questions too. If there's something that you need to know, we'll do our level best to help you out. And if you have any hot tips that no-one should be without, then this is the place! Who knows, we may even award a prize or two for the most helpful letters. The only problem is, being a new magazine 'n' all, we don't have any letters yet! So, for the time being, we've made some up which we think may be the sort of things that you'll be asking.

Whatever's on your mind, stick it in an envelope and send it to:

Public Speaking, Public Domain, Future Publishing, 30 Monmouth Street, Bath BA1 2BW.

Sorry, but we can't reply to your letters personally, so *don't* enclose SAEs – you'll just be wasting a stamp. Rest assured that *every* letter you send will be read and we'll print as many as space will allow.

S Rodger, Romford, Essex

Cross words

I have recently bought a public domain disk called *Crossword Creator*. Unfortunately there weren't any instructions on how to use the program.

I believe that there have been many copies sold. If there is someone who could help me, I would like to know wherher it's possible to enter the clues beside the grids.

There is a name on the disk, Brian Moats, and the date is 1987, but there is no address to contact him direct. Can you help?

ED: Virtually all but the most self-explanatory pieces of software in the public domain contain a document file somewhere on the disk to explain how to use the program.

It's often called READ.ME or something similar. The best thing to do is load the file into a text editor or word processor and read it from there. Failing that, it's possible to look at the file *without* the aid of such a program. The way to view the file varies on the different computers:

- **Amiga:** A viewer program is necessary to see any text file on the Amiga. If there's a 'doc' file on the disk, there will almost certainly be a viewer program as well. Double-clicking on the file from workbench should bring it up on screen.
- **ST:** Double-click on the file. A dialogue box will appear. Click on 'Show' and the text will appear. If some of the text appears to be missing, firstly click on 'Medium resolution' from the 'Preferences' menu.
- **PC:** Use the MSDOS command 'Type'. The information will whizz up the screen, so get ready to hit 'CTRL-S' to pause.

If you can't find documentation files then it's possible that the program has become separated from them. This is why you should ensure that you *always* pass on any documents that accompany a program.

Does anyone have any info on how to use *Crossword Creator*?

Julie Barnes, Nottingham

It's too much

It's an outrage! How can public domain libraries possibly justify charging up to £3 a disk for something that's supposed to be free? Programmers who produce this software do it without any idea of financial gain in mind, yet these libraries shamelessly rip them off.

I'm sure that the libraries will say that they have their costs to cover, but come on! The disk, postage and packing – I can't see it costing more than a pound for the lot. This figure is ridiculous! It's blatant profiteering and it makes me sick!

ED: Yes, libraries do have their costs to cover. But in addition to the ones you mention they have the upkeep of equipment to consider, the printing of catalogues and advertising to let people know about themselves. None of these things are cheap.

In addition, it takes lots of time to run a library. When it grows to a certain size, it may be no longer be possible to run it efficiently in spare time. The librarian may have to take the decision to make running the library a full time business. Then they need some means of supporting themselves financially.

Anyway, there are plenty of cheaper PD libraries around. You're not forced to use the most expensive ones if you don't want to. But it may be that you get a better service.

Are the libraries overpriced? Or are they barely scraping by? Let us know what you think!

Harry Carey, Brighton

Where to go

I've just read through your terrific first issue and my life simply won't be complete without a stack of public domain disks. Trouble is, I don't know where to get them from. Just how do I get hold of public domain software?

ED: There are two main ways of getting hold of public domain software, through a library that has large stocks of these programs, and through a bulletin board.

To access a bulletin board, you first need a modem. This is a device that allows you to plug your computer into the telephone network (through a normal Telecom phone socket) and dial up other computers. Bulletin boards provide a variety of services, one of which is the ability to download PD and shareware software.

Libraries operate a mail order service. Choose the programs you want from a catalogue (or through the adverts in the magazine), send off your order and after a few days a package will pop through your letterbox.

And if you're to lazy to walk to the post office, some libraries accept credit cards, so you can phone in your order and pay by plastic.

Jonathan Northen, Ascot

What difference does it make?

I know that public domain software is completely free, and apart from the charge that the PD library makes, there is nothing more to pay. But I bought a disk from a library the other day and it said that it was shareware and to send off £20 if I wanted to keep the disk.

Why? I've already paid money to the PD library for the disk. I don't see why I should pay for the same thing twice, especially when the second time round is so expensive. Is there some kind of con being operated?

Don't get me wrong – I like the program, it's really good. I just don't think it's right people should try to rip me off in this way. Where do I stand?

ED: No, it's not a con, John. Shareware is *not* free, but a form of software that must be paid for. The money you paid to the library was simply a charge for copying the program onto a disk for you. The person who wrote the program in the first place doesn't receive any of this money for their work, however.

The idea behind shareware is that you can try a program out before you buy it. You only have to pay if you decide to keep the program. That way, you're not risking too much if the program isn't quite what you had in mind. Imagine that you'd bought it from a shop for £20 only to find out it was no good to you. Then you'd really be disappointed.

If you don't like a program that you've bought as shareware, then wipe the disk (or pass it along to someone who you think *might* like it) and there's no harm done. You'll only be a couple of quid out of pocket, rather than 20 notes or so.

But as you say, you *do* like the program. So you should send off the cash – it's the only way that programmers get paid for the hard work they've put in to writing the disk. If you don't, then it's *you* who's ripping the programmers off, rather than the other way round! PD

Programming & Utilities

Jason Holborn takes a look at the best that PD has to offer the more serious computer user.

You might think that PD libraries contain nothing more than *Space Invader* clones and useless demos, but they've got a lot to offer the more serious user too. Whether you're a Sunday afternoon DOS disciple or a seasoned C programmer, you'll find a vast range of utilities to carry out just about every function you could possibly think of, and a fair few that you haven't. These range from simple utilities like disk formatters to complete packages that are often of commercial quality.

Over the coming months, I'll be bringing you page upon page of useful utilities for your machine. All the programs mentioned have been put through a gruelling series of tests designed to push them to their very limits, so if a program is recommended here, you can bet that it's well worth investigating. And for this first issue, I've included some real PD classics...

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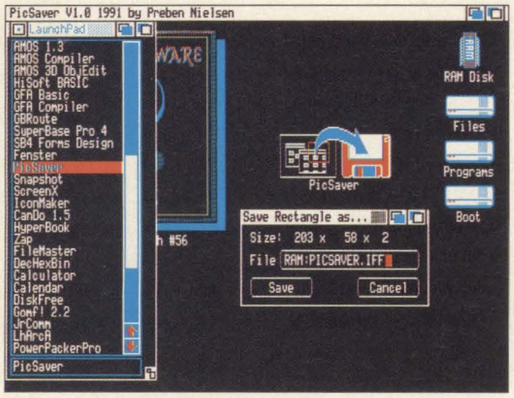
PicSaver

Amiga • TBAG 56 • AmigaNuts United, 169 Dale Valley Road, Hollybrook, Southampton , SO1 6QX. ☎ 0703 785680

Most of the utilities featured in these pages are brand new programs that I've never used before, but *PicSaver* is the exception. It's a utility that's been installed on my hard drive for months now, in which time it has proved itself a real gem.

PicSaver is a handy little program that runs in the background and allows you to grab graphics from virtually any program at any point. It's restricted to Intuition-based programs only, so don't think for one moment that you can use it to grab from games. But if you want to grab graphics from any program that runs under the Amiga's windowing interface, then *PicSaver* is for you.

The program runs in a number of different modes. Once installed, *PicSaver* is brought into action by pressing Control and the Left Shift and Alt buttons. This brings up a cross hair display which can be used to draw out a rectangle. Once you let go of the mouse button, a requester pops up which allows you to enter the filename under which the rectangle is to be saved. Once saved, it can then be loaded into a paint package like *DeluxePaint* and edited to your heart's content.



Need to grab a section of screen? *PicSaver* is a utility that does just that, and it's so simple to use, too.

PicSaver isn't just restricted to grabbing rectangular areas of graphics, though. Simply by pressing 'S' while the cross-hair display is up, *PicSaver* will grab the entire screen. And, if you only want to grab a particular window, just activate the window to be grabbed, activate *PicSaver* and press 'W'. Pretty impressive stuff.

One thing I don't like about *PicSaver* is that it won't grab a screen while a pull down menu is activated. This isn't too much of a problem for most users, but if you're producing something like an Amiga fanzine, then you may find this a little limiting.

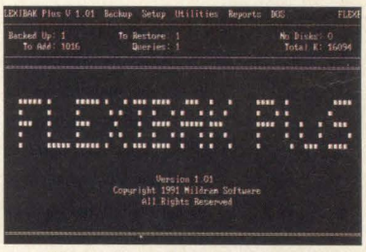
Obviously *PicSaver* isn't for everyone, but if you need to grab graphics from other programs, then you'll find no better screen grabber than this. There are other screen grabbers about, but none are as fast, flexible and as easy to use as *PicSaver*. In all, *PicSaver* is a must.

AMIGA 80%

FlexiBak Plus

PC • Util 109 • Fantasia Shareware, PO Box 1231, Clutton, Bristol. ☎ 0761 53716

If you have a hard disk, then no doubt you'll want to back it up at some point. For most of us, this usually entails using the DOS *Back-Up* program, but it's hardly the friendliest back-up utility you're likely to encounter. Not only that, but you're severely limited in the amount of control that you have over the thing. The answer lies in *FlexiBak Plus*, a shareware program from Fantasia.



We all know that backing up your hard disk is a chore. Make it easier with *FlexiBak Plus*.

Flexibak Plus is a flexible yet easy to use hard disk back-up system that

allows you to make a regular back-up of your hard disk by only backing up the files which have changed since the last back-up. Of course, the first time it's used it will back up all of the files on the hard disk. Any incremental back-ups made after this are placed on the same disks as the original, so you will only ever have one set of back-up disks. The result is considerably reduced back-up times.

A useful feature is *FlexiBak*'s file manager which keeps track of the files you have backed up. If any of these files go missing it will inform you, allowing you to restore any accidentally deleted files. This feature I like.

Flexibak uses a file compression technique that can handle up to 20 hard disk drives. An alarm system is also included which automatically informs you of the last time you made a back-up, to get into the habit of backing up your hard drive on a regular basis. OK, a boring process it may be, but it can save a lot of heartache in the future.

So, if you're fed up or frustrated with the old DOS *Back-Up* routine – and chances are that you *are* – then check out *FlexiBak*. I wouldn't go so far as to say that *FlexiBak* makes backing up a hard disk fun, but it will certainly make it easier. Not only that, but it's much prettier than the rather dull DOS relation!

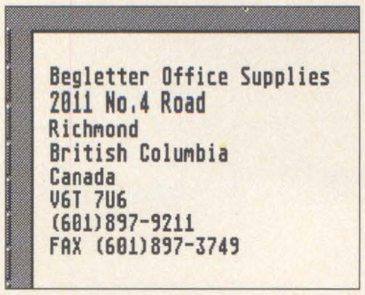
FlexiBak is definitely worth checking out if you own a hard disk. Get yourself a copy now!

PC 82%

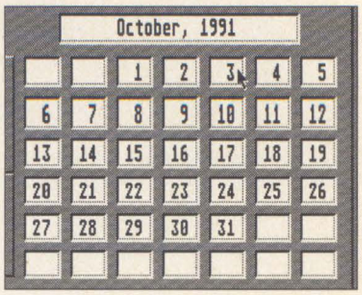
ZeST

ST • DISK 1652
South West Software Library, PO Box 562, Wimbourne, Dorset BH21 2YD

David Becker is obviously a great fan of the NeXT machine, because he's

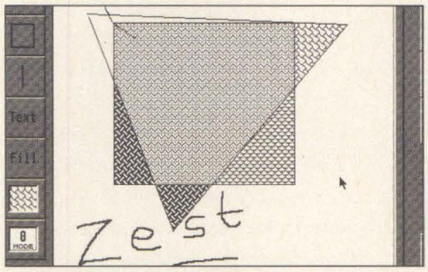


Emulate the NeXt machine on your ST? Well, not quite, but it's pretty impressive all the same.



ZeST has some of the prettiest utilities ever seen on the ST.

come up with an impressive replacement graphical user interface for the ST that bears more than a striking resemblance to Steve Jobs' latest baby. Obviously the ST can't quite handle the resolution of a NeXT, but David has done a pretty impressive job nonetheless. As it is, though, you'll still need a monochrome monitor to run it.



While ZeST looks very impressive it unfortunately can't be used as an alternative desktop in a NeoDesk-fashion.

ZeST tries its best to emulate the user interface of the NeXT, but it offers a lot more than just a few cosmetic changes to the desktop. Running along the left hand side of the screen are four icons which give you access to the four utilities built in to *ZeST*. These include a powerful

cont. on p18

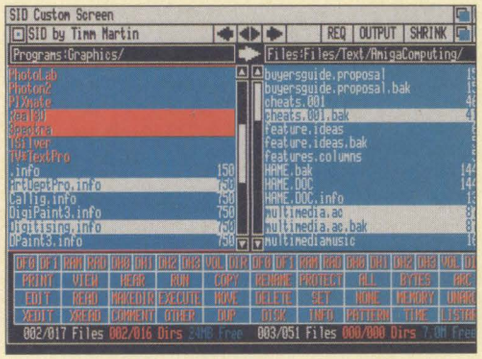
SID 1.6

AMIGA • Fish 338 • George Thompson Services, Dippen Lodge, Dippenbradick Arron KA27 8RN

Tim Martin's famous directory utility has rapidly become one of the most used items of Amiga PD software ever developed. You'll find *SID* happily churning away on Amigas up and down the country, saving Amiga users from the intricacies of the machine's Command Line Interface (CLI).

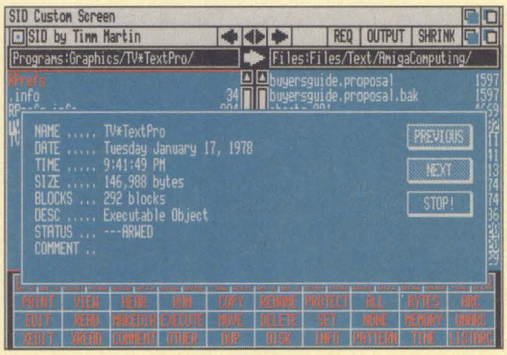
So what does *SID* do? Well, put simply, it's a replacement for the Command Line Interface that swaps all those drab and very forgettable DOS commands for a nice friendly Intuition-based front end. Its aim is simple enough – to give Workbench users the power of the CLI without ever having to type a single command. A tall order perhaps, but *SID* certainly seems to pull it off.

The *SID* main screen is split into two halves, each of which can contain a directory listing of the disk or directory of your choice. Below this is a strip of disk icons, which give quick and easy access to any drives mounted on your system (and yes, it does detect strangely named devices). Below these are the *SID* commands, which are the workhorses of the program. You'll find the usual selection of file manipulation commands including Copy, Delete, Rename, Relabel there, plus a few more that you probably won't find immediately useful.



The Amiga's Command Line Interface is powerful, but a pain to use. *SID* will makes it easier for you.

Several of the functions won't work unless you set up *SID* to run utilities already installed on your system. For example, if you click on an IFF file, *SID* will detect that it is a picture and try to display it. Unfortunately, *SID* isn't quite man enough for the job, so you must have something like *VILBM* (a PD picture viewer) installed on your system if *SID* is to display the pic.



SID offers a whole host of useful utilities. For example, you can easily check out your files.

The advantage of this approach is that you're not restricted to the tools that are built into *SID*. If you have just found this super duper picture viewing utility that can display just about every image format under the sun, then as soon as you tell *SID* about it, it'll use it. I'm sure you'll agree that this is a much better approach.

Files are selected from the two directory windows simply by clicking on them with your mouse. If you double click on a file, *SID* analyses the file and functions accordingly. I've already described what happens if it's a picture, but *SID* tries its best to tell you what type of file you've clicked on no matter what kind of file it is. It does this by displaying a requester which also contains all sorts of other useful information.

I must admit that I'm not a new user of *SID*. It's been installed on my B2000 system for over a year now, during which time it has served me without question. I know the Amiga CLI inside-out, but *SID* provides a much faster way of carrying out CLI-like operations that would previously have been possible only from the CLI itself. Whether you're an experienced user or a completely new Amigan, you simply have to buy *SID*. It's quite simply the most powerful DOS utility ever devised!

AMIGA 92%

cont. from p17

address book program, a calendar, a typewriter and a basic paint program.

All four programs employ the same NeXT-like user interface, making them some of the prettiest utilities I've seen on the ST for a long time. Obviously looks aren't everything, so you'll be pleased to learn that the programs themselves aren't half bad either. I particularly like the address book, which also doubles up as a simple database.

Unfortunately, *ZeST* isn't really a true replacement for the ST's desktop environment. For starters, there's no way you can carry out all the usual disk operations that are so easy with the desktop. Even accessing a disk to read its directory is impossible, which limits *ZeST*'s usefulness greatly.

If David could put in the extra effort to give *ZeST* desktop-like disk operations, then I can see it doing well. I for one would probably choose it in preference to such desktop alternatives as *NeoDesk*.

As a program in its own right, *ZeST* is still worth acquiring. The nice posh NeXT-like user interface is a bonus, but the four utilities are well worth having anyway. Who knows, perhaps we'll see *ZeST 2.0* eventually with all the fixes that I've suggested.

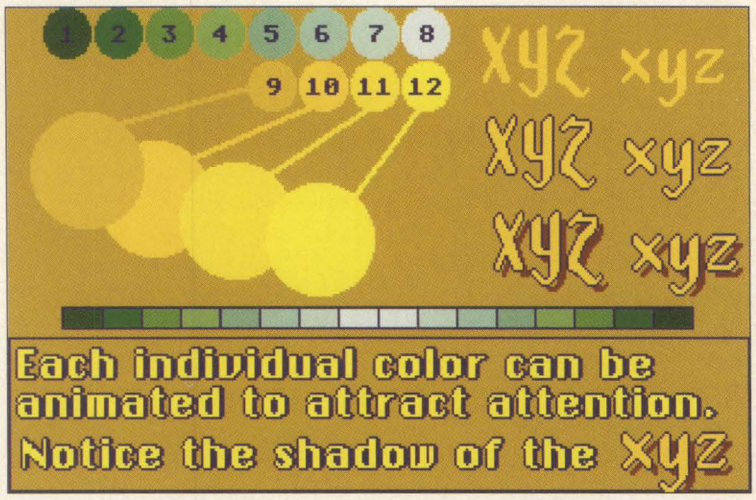
ST 72%

TV Titler 2.0

ST • AU-0050 • Caledonia PDL, 250 Oldtown Rd, Hilton, Inverness IV2 4PT

Unlike the Amiga, the ST has never really been treated as a serious contender in the Desktop Video market. Despite the fact that such companies as Third Coast distribute a wide range of genlocks and other video peripherals for the ST, the range of quality desktop video software available for the machine leaves a lot to be desired.

But don't worry because, as always, the public domain can offer a solution. Some of you may remember a PD program called *TV Titler* which was handed out on the cover disk of our sister magazine *ST Format*.



The *TV Titler* 2.0 demo is a stripped down version of the full-priced product, but it is still very impressive. You'll need a genlock to be able to use it, though.

Well, *TV Titler* author JP Doziel has been hard at work since then, coding away to produce a major upgrade to his well-received PD video titling package. The result is now available in a PD library near you.

*TV Titler 2.0 is*a video titling package which gives many commercial offerings a run for their money. It works by carrying out various graphic manipulations of Degas-format images. As you've probably already guessed, this basically means that *TV Titler* doesn't create the titles itself – it only displays them. As a result, you need a Degas-format paint package (*DPaint, Degas Elite, Cyber Paint* etc). Preferably, try

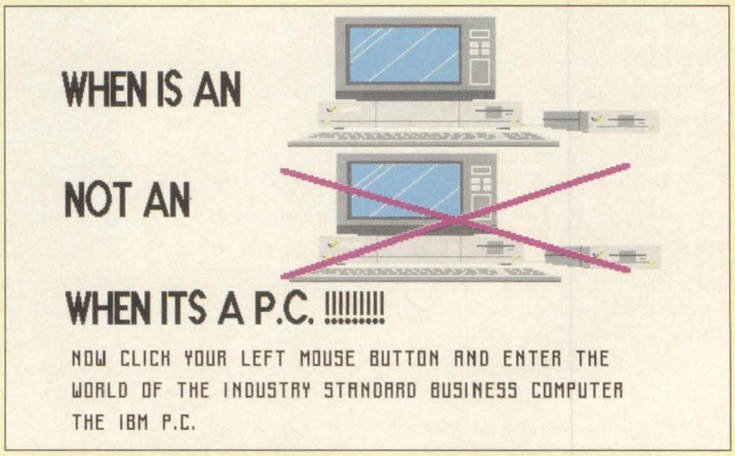
IBEM

Amiga • Office Choice PD Suite 14, Aron House, Town Centre, Cumbernauld G67 1EJ. ☎ 0236 737901.

Now here's a real gem of a program. Believe it or not, those very nice people at Office Choice PD have come up with a disk containing no less than a fully functioning PC emulator for the Amiga.

Unlike commercial emulators, such as KCS's Power PC Board and Silica's ATonce, *IBEM* is completely software-based, so you don't need to splash out on some expensive hardware to get the thing to work. With little more than a (legitimate) copy of MS DOS and this disk, you can run PC software on your Amiga. Think what fun you'll have playing with Windows and Lotus *1-2-3*, not to mention all the brilliant utilites I've mentioned in this column.

IBEM isn't a new program. It's been floating around the PD libraries for quite some while now, but this latest release has one major advantage that makes it a far more attractive acquistion – you don't need a 68020 processor to run it. Yes folks, for some reason known only to the guys that wrote the thing, the previous release was a bit on the power-hungry side.



Ignore the rather appalling joke and just click that mouse button to turn your Amiga into a PC with *IBEM*, a nifty PC emulator that means you'll be able to run all those snazzy PD PC utlities.

Now that this rather major problem has been removed, everyone – well, everyone with an Amiga anyway – can take advantage of this impressive emulator. At a stretch it'll even run on a basic 68000-based 512K Amiga 500 – though the documentation recommends one meg.

Like Commodore's own *Transformer* PC emulator, a rather naff software-based emulator that ran at about 0.00001 MHz (it had a Norton SI rating of 0.2, which is one-fifth of the speed of the slowest PC ever made), *IBEM* emulates the IBM XT. The program fully supports the 8088 instruction set and offers CGA screen mode emulation too. Very nice, I'm sure you'll agree.

What is really nice about *IBEM* is that it runs as a task in its own screen. As a result, you can run PC and Amiga software concurrently, swapping between either whenever you feel like it. That's really quite an impressive achievement when you consider that even the KCS board can't handle this!

Unfortunately, and here comes the catch, the PD version of *IBEM* is only a demonstration copy. Although it works well enough, the emulator can only be run for a maximum of 15 minutes before it locks up – barely time to boot up your copy of *WordStar*. In a way, this program is little more than a very elaborate demo disk; we're back to that annoying habit some software companies have of using the public domain for advertising purposes.

If you want the full version, then you're going to have to fork out a heftyish $30 shareware fee. But while this may be a bit steep for a shareware program, *IBEM* is still one hell of a bargain!

AMIGA 69%

to get a paint package that supports GDOS format fonts, as this will give your titles a bit more variety.

The version of *TV Titler* included on the disk is actually a vastly cut down version of the full program. You can still play around with the package (you can change a few of the effects for example), but this is as far as it goes. If you want the full version, then you'll have to write out a rather large cheque for £25 and send it to Caledonia PDL.

Although not a package in its own right, the *TV Titler 2.0* demo is still worth investigating just to see the kind of things that are capable on an ST running some decent software.

If you own an ST genlock, then I'd strongly advise you to take a look at this demo. If it's anything to go by, I'm quite sure that the full version of *TV Titler 2.0* must be one hell of an impressive program.

ST 77%

Winbatch

PC • WIN 064 •
Omicron Systems Ltd,
45 Blenheim Crescent,
Leigh-on-Sea, Essex, SS9 3DT.
☎ 0702 710391.

It doesn't take a brain the size of a planet to suss out what *Winbatch* is all about. As its name suggests, *Winbatch* is a utility which allows you to write batch files to control MicroSoft Windows 3.0 running on a PC with at least 640K of RAM (isn't it time you upgraded your PC).

It gives the user all the usual functions of the DOS batch file control language, but also adds many more features. With more than a hundred functions available, *Winbatch* allows you to set up batch programs which run both Windows and DOS programs either sequentially or even concurrently. You can directly manipulate Windows, directly access any named file, control Windows' clipboard (which is used to pass data between applications) and there's even a few arithmetic and decision-making commands thrown in for good measure – and this is only a fraction of what it can do!

This software is a must for any one who uses Windows to any degree, as it allows you to take much of the drudgery out of the repetitive steps needed to move around the Windows environment. For programmers who create Windows software (or engineers who set up applications) for other users, this could be a good way of stopping them wandering around what can be the quite complex and confusing environment by simply placing them where they need to be. As any PC programmer will tell you, such a facility is damned useful.

PC 85%

Take the drudgery out of moving around Windows with *Winbatch*.

InputLock

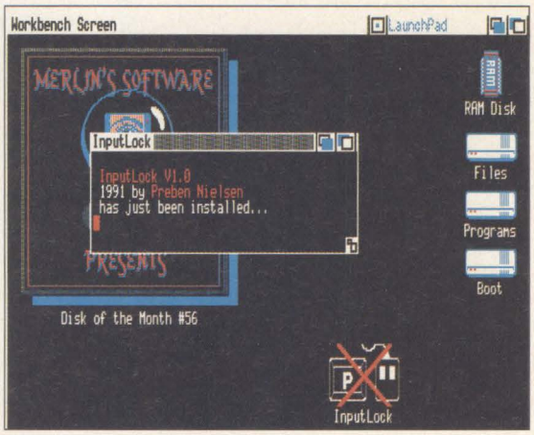
AMIGA • TBAG 56 •
AmigaNuts United,
169 Dale Valley Road,
Hollybrook,
Southampton SO1 6QX

InputLock is one of those program that doesn't actually do a great deal, but what it does do it does very well indeed. Its sole role in life is to allow you to protect your machine from any children or pets that might play around with it when you leave the room. Obviously you could turn the machine off (this is still the best method of protecting your files), but *InputLock* achieves the same results without you ever having to flick the power switch.

By installing it on your boot disk and then invoking it from your start-up sequence, you can turn all mouse and keyboard inputs off and then back on again using a simple set of keystrokes. I've tried it and it certainly works, so there's really little else I can say.

If this sounds like the kind of thing you've been looking for, then give it a whirl. It's definitely the best program of its kind, but then there aren't really that many alternatives.

AMIGA 75%



Make sure that twitchy fingers don't lose you all those important files by securing your keyboard with *InputLock*.

cont. on p20

Empire Soundtracker

ST • Riverdene PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN
☎ 0734 452416

Every ST owner knows the problems of getting half-decent music out of their machine. In its infinite wisdom, Atari decided to place an extremely crappy sound chip inside, the same one, in fact, that you'll discover in any Amstrad machine. However all is not lost; there are ways of getting your ST to sound tuneful and *Empire Soundtracker* is one of these.

Soundtrackers enable a computer to play four samples at the same time. These samples can be of any sound imaginable, so therefore you can recreate virtually any song. With a bit of clever use of the samples it's easy to produce any style of music. There are commercial soundtracker programs on the market, but this one is just as good and won't set you back more than three quid.

The front panel of the Empire Soundtracker displays all the information you need to playback or record music. Several songs (modules) are included on the disk with the program and these can serve as a way of learning how to program a song.

At the bottom portion of the screen are the four channels on which the note information is recorded. It is via these that you enter details such as pitch, length and sample identity as numerical information.

This isn't as difficult as it sounds because you can also choose a sample and experiment with various pitches by turning on the keyboard option, which emulates a standard piano keyboard.

The number of different samples that can be held in memory at any one time depends entirely on how much memory you've got and how big each sample is. With a one-meg machine you can hold about 20 two second samples in memory. This is more than enough to create a realistic sounding song.

Each song is arranged in the form of a series of patterns. So for example one pattern might be the introductory notes, the next pattern the main phrase and the third a change in key. These patterns can then be played back in any order, meaning that memory usage is kept to a minimum.

STE owners benefit from the stereo positioning option, which takes advantage of its stereo sound chip.

ST 91%

The gateway to chart success? *Empire Soundtracker* adds a hit-making capability to your ST.

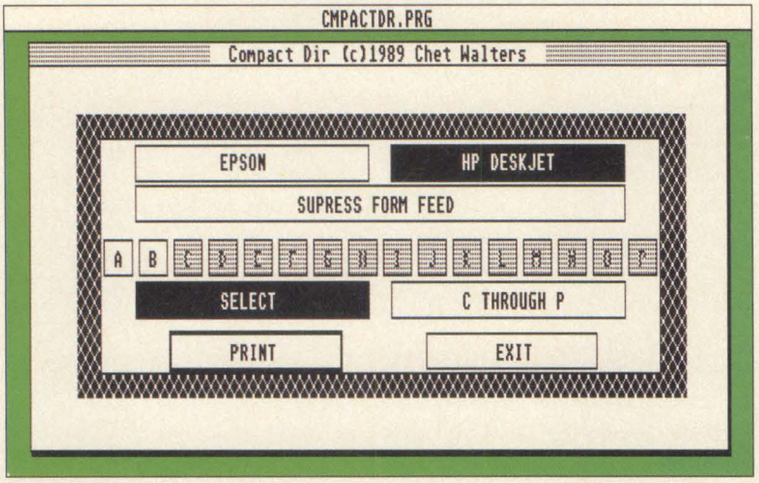
cont. from p19

Deskjet Utilities

ST • Util 48 •
ScotSoft International,
47 Auchingane, The Tryst,
Edinburgh

If you own a Hewlet Packard DeskJet printer, then this is a disk that you just have to own.

It contains no fewer than 16 utilities which make using a DeskJet an absolute pleasure. They include an address labeller, a disk directory listing program, a Degas screen dump utility and a utility to make setting up your DeskJet a considerably easier task. One program which particularly took my fancy was Bill Aylward's *HPtoGDOS* utility. Sourcing quality GDOS fonts is an almost impossible task these days, especially if you need really high resolution fonts for use in packages like *Timeworks DTP*.



All DeskJet owners should rush out and get a copy of *DeskJet Utilities*, packed with 16 essential programs.

But, as HP DeskJet owners will tell you, they have no problems at all sourcing 300 dots per inch fonts, so it seems logical that someone should come up with a utility that would convert HP fonts to GDOS format. Well, surprise, surprise, *HPtoGDOS* will do just that.

ScotSoft's HP DeskJet utility disk is a real must for anyone who owns a DeskJet or compatible printer. I would thoroughly recommend that all DeskJet owners should acquire themselves a copy now!

ST 82%

GFA Basic 2

ST • Riverdene PDL,
30a School Road, Tilehurst,
Reading, Berkshire RG3 5AN.
☎ 0734 452416

If you're after a BASIC programming language for your ST, then look no further than this disk from Riverdene PDL. Believe it or not, it contains no less than a fully functioning version of GFA Data Media's acclaimed *GFA BASIC* programming language. And when I say that it's the full version, I'm not joking – every single feature from the commercial release is here.

```
| Save   |Save,A | Quit   | New    |Blk Sta|Replace| Pg up |
| Load   | Merge | List   | Block  |Blk End| Find  |Pg down|Insert
Dim Book$(2,10)
For Count=1 To 10
  Read Book$(1,Count),Book$(2,Count)
Next Count
Lookup$=""
While Lookup$<>"f"
  Print
  Input "Enter a name to search for (or f to finish): ",Lookup$
  If Lookup$<>"f" Then
    Found=0
    For Count=1 To 10
      If Instr(Book$(1,Count),Lookup$)=1 Then
        Print "The corresponding telephone number is ";Book$(2,
        Found=1
        ==)          END IF
      Next Count
      If Found=0 Then
        Print "Sorry, no telephone number found for ";Lookup$
        ==)          END IF
        ==)   END IF
    Wend
    Print
    Print "End of run"
```

What a bargain! Now you can own *GFA BASIC* for little more than the cost of a disk!

There's no restriction on how long the program can be used for, no restriction on saving or even the size of your programs.

So why hand out what amounts to a commercial product? Well, GFA isn't stupid. For starters, you don't get a printed manual, so unless you want to print out the rather substantial text file that is also included on the disk, you don't get any form of documentation that can sit beside you during those long coding sessions. Not only that, but the on-disk manual isn't quite as comprehensive as the one that legitimate users get.

This isn't the only reason, however. GFA would also like to make some money out of you. By giving you the interpreter free of charge, they hope that you'll be so impressed by it (which you undoubtedly will) that you'll rush out and buy GFA's other products, including the *GFA BASIC Compiler*. GFA isn't totally heartless though – if you buy the *GFA Compiler* (which really is worth obtaining), then GFA will also throw in a manual for the interpreter. You can't say fairer than that. (The compiler/manual package costs just £20, so those of you who are tempted, won't have to part with too much dosh.)

So what's so special about GFA BASIC? Well, to put it bluntly, *GFA BASIC* is the best version of BASIC yet produced for the ST. Even such competitors as *STOS*, *Fast BASIC* and *HiSoft BASIC* can't touch it for speed and power. And with the release of *GFA BASIC* version 3.5 (which isn't a PD product!), you won't go far wrong with this disk.

GFA's command set certainly makes pretty impressive reading. There's the usual selection of string and number manipulation commands, plus some quite powerful program control structures and a very impressive set of graphic commands. All these are executed at a blistering rate. Even if you don't compile your programs, GFA applications run almost as fast as compiled C programs. Compile them and you'll have an application that can blow away just about any other language bar none (well, excluding assembler of course – and even that is a pretty close thing!).

Surprisingly, the disk doesn't contain some very important files. For starters, GFA hasn't handed out the GFA runtime system, which limits the scope somewhat for producing applications that can be handed out. Then again, you'd be foolish if you didn't take up GFA's offer on the compiler. Not only does it allow you to produce stand-alone programs, but you also get that all-important manual!

Another surprising omission is the total lack of example programs. I can't quite understand why GFA didn't throw these in as well – perhaps the company thought they were already giving too much away. Oh well, this shouldn't prove to be too much of a problem when you consider how common GFA-produced applications are in the PD libraries!

If you only ever intend buying one PD (well, sort of) disk, then it has to be this one. *GFA BASIC* is such a powerful language that virtually anyone can produce applications ranging from simple games and utilities to full blown packages. In all, *GFA BASIC* is one of the true PD bargains. Miss it at your peril!

ST 95%

SuperDooper

Amiga • TBAG 55 •
AmigaNuts United,
169 Dale Valley Road,
Hollybrook, Southampton ,
SO1 6QX. ☎ 0703 785680

The Amiga's bundled disk copying and formatter utilities aren't actually that bad, but there's still a lot of room for improvement.

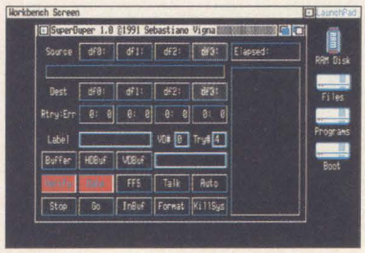
One problem with them is that unless you're using them from the CLI (Command Line Interface) they give you no control whatsoever over how they function – choosing which disk to be formatted or copied is about as interactive as things get.

SuperDooper is a program that virtually makes both system programs redundant. It can format and copy disks in considerably less time than the system programs, while still managing to give you greater control over copying and formatting parameters. Not only that, but it also happens to look rather splendid too.

Before we go any further, I must point out that *SuperDooper* won't copy software that has been copy protected, so don't buy it thinking that you can rip off all your friends' games. Not only is this illegal and rather naughty, but it's totally immoral, so don't do it. Anyway, who needs commercial

games when their PD cousins are so damned good!

Speed is undoubtedly *SuperDooper's* greatest asset, though. A disk is copied and verified in about 99 seconds. Without verify, the time drops to 70 seconds. You can buffer a disk in RAM in 36 secs, and then making a verified copy will take 67 secs, while a non-verified copy will take 37 seconds. Adding another destination drive increases verified copy times by 34 seconds, but doesn't



Make four copies of a disk in just 37 seconds? Impossible? No, not with *SuperDooper*.

increment non-verified copy times at all (the Amiga can write and step more than one drive at a time). So, if you really trust your drives and your media you can make four copies in around 37 seconds!

SuperDooper is a super (sorry) little program apart from one very annoying thing. Every time you set the program up to carry out an operation, it asks you to remove all disks from any drives connected to the system. This can be very annoying indeed after a while, especially if you're as lazy as me. Even the system formatter and diskcopy utilities don't do this, so why should *SuperDooper*?

If you can put up with this very annoying feature, then give *SuperDooper* a whirl. It's another handy program that has found a permanent home on my hard disk. But don't take my word for it – take it for a test drive yourself.

AMIGA 78%

DDS

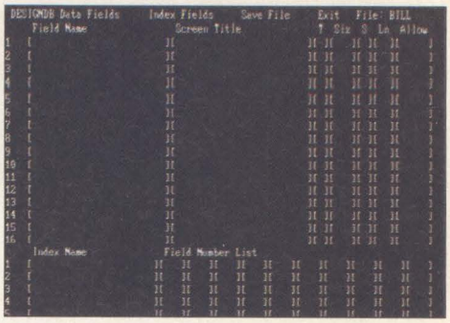
PC • Prog-087 • Fantasia Shareware, PO Box 1231, Clutton, Bristol. ☎ 0761 53716

Here's one for all those techy PC C programmers out there. *DDS* (which stands for *Database Development System*) is a powerful applications generator. It's a shareware program that allows you to produce database applications from within a set of development utilities and then save them out in C source code that can be compiled to produce stand-alone programs.

Obviously this means that you need something like *Turbo C* to compile the code, but once compiled, the finished database applications run at a very acceptable speed. The databases themselves can contain multiple indexes per file and variable length records and indexes (which can lead to a considerable saving in file size – typically 50 per cent!).

You can set up powerful cross referencing between files with up to 32 files and 16 screen displays used within a single application – let's face it, this should be more than enough for most of us!

The system consists of a database designer, a database indexer, a forms (screen display) designer and a basic applications designer which does the hard job of converting your database application to compilable C code. And, because the code is saved in ASCII, you can



DDS makes designing database applications that can be saved as C source code a real doddle, and the resulting databases can contain multiple indexes per file.

cont. on p22

A-Gene V3.25

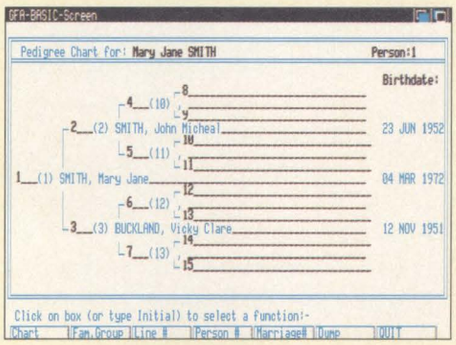
Amiga • A-Gene • AmigaNuts United, 169 Dale Valley Road, Hollybrook, Southampton , SO1 6QX. ☎ 0703 785680

Have you ever wondered who your great ancestors were? Most of us have fairly humble roots, but who knows, you could well be related the King Arthur, or even the chap that brought him breakfast first thing in the morning. With a copy of *A-Gene* and a little bit of research, you too can build up a family tree that goes back as far as your research will take it.

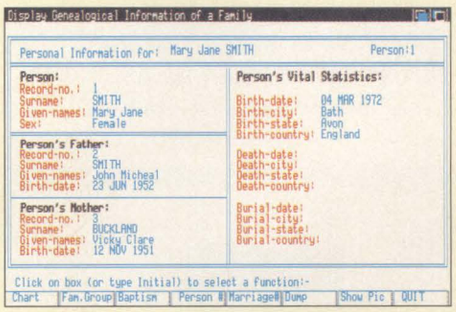
A-Gene is an absolutely brilliant genealogy program that takes the hard work out of constructing family trees. It's basically a glorified database, but it has been specifically designed to make the process of working out who your ancestors were as simple as possible. Running from within its own friendly little Intuition-based user interface, *A-Gene* allows you to build up a massive database of individuals and marriages and how they all relate.

Each individual is fed into *A-Gene* as a separate record which is cross referenced to two other records containing the details of the mother and father respectively. Each record can contain a large number of facts about that individual including full name, birth date and place, death date and place and finally burial place and date. Pretty morbid stuff, but there you have it.

Marriages can also be recorded using a separate record which joins individuals in holy matrimony. Obviously each individual can have several marriage files associated with them (the program probably couldn't cope with Liz Taylor's marriage file, though). Once you create the



Simply by specifying the individual at the top of the tree, *A-Gene* will generate that person's family tree.



Detailed information on any individual in a family tree can be extracted with ease.

marriage file, the computer then automatically adds the details to the file of any children produced as a result of that marriage.

Once all the data is fed in, you can carry out all manner of database querying. You can ask it a large number of questions about your ancestors, with all the relevant facts being detailed in nice friendly on-screen tables. These can also be dumped out to printer, so you can share your genealogy knowledge with your friends.

As you'd expect, *A-Gene* can also produce one of those really nice tree charts which we all used to hate so much at school (well, I did anyway!). Simply by telling the program who you want to be at the root of the tree, *A-Gene* then plots a chart showing all the descendants of that person and the people they married (or at least had flings with). This can also be printed out to paper, so your Auntie Mavis can have a butchers at the results as well.

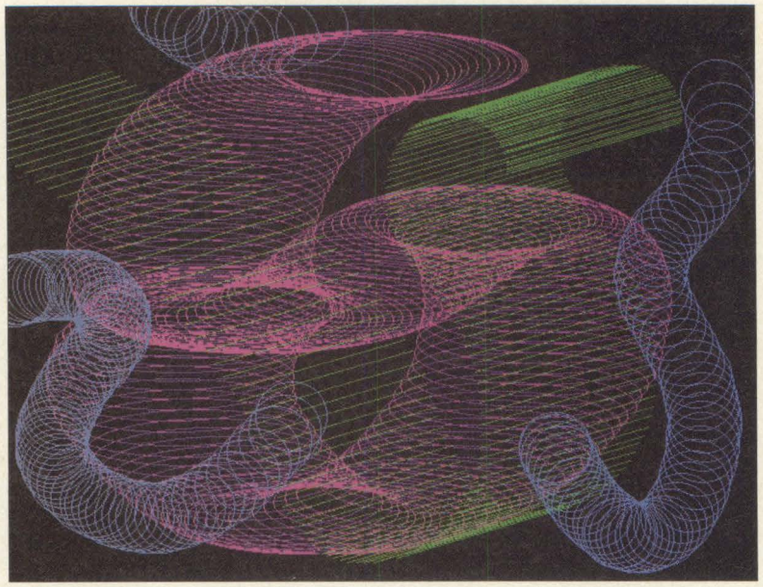
A-Gene has a few annoying quirks, but on the whole it's a solid and very reliable piece of software. Amiga genealogy software is a little thin on the ground, so it's nice to find a program that not only fills the gap, but fills it well. It's a licenceware program, and at £15 is more expensive than most. But if you've been meaning to get round to finding out exactly who you are, then the £15 asking price is worth every penny.

AMIGA 85%

further tweak it yourself to suit your own particular requirements.

DDS is undoubtedly a powerful system, but it's let down only by its unfriendliness. There's no friendly front end and the 300-page manual is hardly bed time reading material. If you feel like a challenge, then check out *DDS*. However, the squeamish should definitely not apply.

PC 65%



***Mackie* makes loading programs just that little bit simpler by reducing the process to one or two quick keystrokes.**

MACKIE

cont. from p21

AMIGA • Fish 305
George Thompson Services, Dippen Lodge, Dippenbradick Arron KA27 8RN

Have you ever wanted to run a program without ever having to flick through an endless series of windows or wait while the Amiga disk drive churns away trying to pull up a directory? If you have, then *Mackie* could well be the utility for you.

Written by Tomas Rokicki, *Mackie* is a versatile CLI/macro-key initiator based on the well known PD utility *PopCLI*. In an instant, you can call up the program of your choice simply by pressing a specified series of keystrokes. Obviously you then have to wait for the program to load (things would get a little crowded in a 512k Amiga!), but *Mackie* makes the process of loading a program just that bit less of a chore.

Setting up *Mackie* is childsplay. All you have to do is to create a configuration file that contains all the macro definitions you require using any one of a number of ASCII text editors. This file must then be placed in the S: directory of your boot disk and the program itself is then invoked from your Start-Up sequence.

You can now call upon all those Macros simply by 'HELP' (which is the *Mackie* system key) and then the code you require. For example, you could set it up to run *Deluxe Paint* by pressing HELP D.

Another nice feature of *Mackie* is that it also doubles up as a screen blanker. Unlike most programs, it doesn't just present you with a boring blank screen. Instead, it can be set up to draw continuous pretty patterns on the screen. Very nice!

Mackie is a little limited when used on a floppy-based Amiga, but it really comes into its own on a machine equipped with a hard drive.

AMIGA 82%

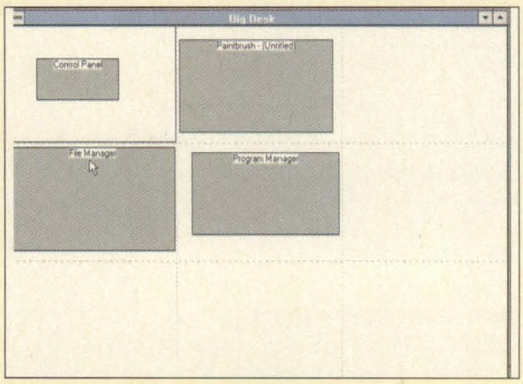
Bigdesk

PC • WIN 084
Omicron Systems Ltd, 45 Blenheim Crescent, Leigh-on-Sea, Essex, SS9 3DT.
☎ 0702 710391.

MicroSoft Windows 3.0 is undoubtedly powerful, but it can also be jolly frustrating to use. I'm sure you know what I mean – how many times have you searched frantically through all those windows trying to find the application that you want? If you too suffer from this problem, then *BigDesk* is for you.

What it does is to provide you with an operating area, which is nine times the size of the standard Windows control screen. In this new expanded window it is then possible to arrange your Windows applications so that they are visually separate, rather than all sitting on top of each other. This has the major benefit of allowing you to easily see and select the application that you want to use by simply pointing at the area of the screen that it's in.

BigDesk will then move you directly to that application, displaying it as the main Windows screen without you having to bother with moving applications around, closing windows, shrinking and expanding windows and all those other annoying things you would normally have to do to get rid of screen clutter. This, I'm sure you'll agree has to be a good thing.



Fed up with all that clutter on your screen? Then waht you need is *Big Desk* so that you can organise your windows.

On this same disk are a couple of other good pieces of software. These include a handy little utility that allows you to move the mouse pointer around the screen with the keyboard. There's also DOS-like command line utility, allowing you to enter DOS commands from within Windows, a filename descriptor (which allows you to tag a 35 character description to a file) and a digital clock which sits on the caption bar of a window.

One very nice extra little utility which is included is an applications timer, which allows you to automatically run a Windows, or DOS program at a specified time. Alternatively it can be set to run an application at a timed interval. This could prove to be invaluable for making automatic back-ups of your hard disk.

I must admit that I was very impressed by *BigDesk*. Getting used to it takes no time at all and once you've mastered it, you'll never look back! Definitely worth looking out for.

PC 80%

ARTM

AMIGA • 17Bit Disk 1280
17 Bit Software, PO Box 97, Wakefield, WF1 1XX
☎ 0924 366982

Everyone knows that the Amiga's operating system is powerful, but it's also damned complicated. All this talk of resources, devices, tasks, processes and libraries is enough to reduce even the most hardened techie to a bag of nerves. Help is at hand though in the form of *ARTM* from 17 Bit Software.

ARTM is a powerful realtime operating system monitor that allows you to view the inner workings of the Amiga's powerful Exec system. Everything is covered, ranging from windows and resources, to libraries, tasks, processes, interrupts and a lot more besides. What's more, *ARTM* is fully intuition-based, making it a real joy to use.

The *ARTM* window is split into two discrete areas. The largest of these is the work screen which displays all the information about your system. Below

cont. p2

AMIGA PUBLIC DOMAIN LIBRARY

AMIGA DEMOS

Some people love them, some people cannot see the point of them, but they are here to stay!
There is no better way to show off your Amiga!

D 001 ALCATRAZ MEGADEMO 4 (3 DISKS) Brilliant! One of the biggest.
D 008 STATIC BYTES MEGADEMO Six parts, clever stuff.
D 014 CRYPTOBURNERS MEGADEMO 2 Contains some good demos. worth a look.
D 033 TOMSOFT TRIP TO MARS. Vector graphics with a theme *
D 034 BUDBRAIN MEGADEMO (2 DISKS) A classic! Not to be missed but beware of the very risque cartoons.
D 035 CRIONICS MEGADEMO Another great! Famous for the Madonna part.
D 061 POSSESSED MEGADEMO (2 DISKS) Good animated space intro
D 067 MIRAGE MEGADEMO (1 MEG) Yet another good one. Some good FX.
D 078 CRIONICS NEVERWARE (1 MEG) Famed for the brill Madonna graphic.
D 080 KATHARIS MEGADEMO From Poland! Famous X-Copy demo, plus.
D 081 INTUITION MEGADEMO Includes the flashiest ever aciid demo.
D 091 FILLET THE FISH Similar to PUGGS, but not as good, still brill.
D 125 DEXION MEGADEMO Underrated at the time. Old but good
D 135 REBELS MEGADEMO Excellent for its time. Good demos.
D 136 ALCATRAZ MEGADEMO Again underrated at the time but very good.
D 138 RAF MEGADEMO (2 DISKS) Still fresh after all this time!
D 141 PHENOMENA MEGADEMO Brilliant group today, always been good.
D 146 RSI MEGADEMO (2 DISKS) An all time great! Still good today! Great music and graphics. A must!!
D 150 IAN & MICK MEGADEMO Inc. classic toilet door demo.
D 153 PUGGS IN SPACE Not generally classed as a megademo, but not to be missed. Great for the kids.
D 160 TRILOGY MEGADEMO (2 DISKS) Includes game, a classic, contains a joke, or is it a bug? You decide.
D 161 PREDATORS MEGADEMO (2 DISKS) Don't miss this one, great sound, graphics and game. Another classic.
D 166 SILENTS MEGADEMO Early Silents, the brilliance is born!
D 180 SCOOPEX MENTAL HANGOVER Another classic which pushed the boundaries of the Amiga light years on.
D 190 RSI CEBIT DEMO. Terrific demo, with the best ever music *
D 223 BUDBRAIN MEGADEMO 2 Not quite as good as the first, stillgood!
D 225 HORIZON MEGADEMO (Sleeping Bag) Superb ray traced anim. Great
D 236 GOLDFIRE ULTIMATE FX....This group continues to improve!!
D 242 3-D DEMOS....Get out your 3-D glasses and CHECK THESE OUT!

POWER DEMOS

(All demos in this section require loads of memory)

P 001/2 WALKER DEMO 1 (2 MEG 2 DISKS)
P 003/4 WALKER DEMO 2 (2 MEG 2 DISKS)
P 021-026 UPGRADE(1.5 MEG 2 DRIVES 6 yes 6 disks!!!) multi part anim
P 010/11 HEADKICK ANIM (2 MEG 2 DISKS plus HARD-DRIVE)
P 012/3/4 STATION AT KHERN (2 MEG 3 DISKS)
P 030/1 DRAGONS LAIR 2 GAME DEMO Superb (3 MEG, 2 DISKS)
P 032/3/4 BUZZED Great Ray traced anim (2 MEG, 3 DISKS)
P 035/6/7/8 AUTOMATED LIGHT (BATTLESTAR GALACTICA) (3 MEG, 4 DISKS)
P 044/5 ANTI LEMMING DEMO (2 MEG)Excellent Eric Shwartz animation.
P 046/7 THE DATING GAME (3 MEG 2 DISK SET) 4 mins long anim!! Truly impressive Eric Schwartz demo
P 050-3 TOBIAS RITCHER: LANDING (4 MEG) (4 DISKS) Brilliant!

AMIGA DEMOS

D 243 KEFRENS - THE WALL.....Great intro! Good graffix, then so so
D 259 PHENOMENA ENIGMA Absolutely Awesome!!! Fantastic, Get it
D 261 SIMPSONS DEMO BY DECAY: Probably the best so far. (1 MEG)
D 264 ANALOGUE MEGA DEMO. Great intro and novel demo selection.
D 265 GALLOW MEGADEMO Purple Haze! Great colours, fair demos.
D 267 BASS MEGA DEMO. Great housey music throughout.
D 269 PULLING THE TRIGGER. Loved the music! Well presented demos (1 meg)
D 294 SILENTS: ICE MEGADEMO (1 MEG) Brill demo, More interesting for coders.
D 295 TOMSOFT: VIRTUAL WORLD (1 MEG) Its a classic. Best this year.
D 296 MAGNETIC FIELDS: HYSTERISIS. Good demo, now loader friendly.
D 299 TAS EGO TRIP (1 MEG) Huge demo, great music and value.
D 700 PMC ALPHA OMEGA Ray-tracing, vectors, excellent.
D 704 ITS MENTAL 3 Sick jokes, cartoons etc. Not for the nervous.
D 705 VOYAGE Cleverly linked demos. Good vectors.
D 706 THE CULT: VECTOR DANCE 2 Good GFX and original vector FX.
D 708 ANARCHY DEMO So new I can't remember what it was called!!
S 393/4/5 DEFINATIVE MADONNA SLIDESHOW...(3 disks) 1 meg & 2 drives
S 441 INVISIBLE WORLD SLIDESHOW. See it and itch. Micro bugs
S 486/7 WWF ANIM AND SLIDES (1 MEG) (2 DISK SET) US wrestling
H 545 JET FIGHTER ANIM...Similar to The Run, but far far better (1 MEG)
H 555 BATMAN THE MOVIE ANIMATION (1 MEG)....Good funny cartoon
H 559 MAGICIAN AND JOGGER ANIMATIONS (1 MEG). .Ray traced anims.
H 560 CAR & UNICYCLE ANIMATION (1 MEG)....Brill anim, a must for fans!
H 564 EVIL DEAD DEMO (1 MEG).. Get the goulies, before they get yours
H 565 RGB & FOCUS (1 MEG)....The famous 'stretching nose' animation!
H 573 TOO MUCH 3D (1 MEG)....The spaceship flies out of the screen!
H 576 IRAQ DEMO Amusing animation of what might have been
H 577 MORE AEROTOONS More in the series of Stealthy cartoons
H 579 MORE CLASSY ANIMATIONS More cute anims from Steve Packer
H 607 WINGS ANIMATION. Brilliant stuff and long too! (1 MEG)Good
H 636/7 STAR TREK MEGADEMO (1 MEG, 2 DISKS) Best of Ritcher!
H 645 YET MORE CLASSY ANIMATIONS 2 Super-Star chuck anims
H 647 VIETNAM ANIM (1 MEG) Another Stealthey-type animation
H 650 OPTIMUM PRESSURE CRISIS (1 MB) Great series of animated slides
H 652 YET MORE CLASSY ANIMATIONS 3 Latest works from Steve.
H 653 YET MORE CLASSY ANIMATIONS 4 .....and more.
YET MORE CLASSY ANIMATIONS 5 Final in the series
X110 FRAXION HORROR Great cartoon graphic demo of nasty stuff.

MUSIC

M 005 MAHONEY & KAKTUS Brilliant music disk
M 030 DIGITAL CONCERT 2: Over 12 mins of mixed house music.
M 200/1/2 SAE AMAZING TUNES 2 (3 DISKS 1 MEG)...Superb!
M 212 MAG FIELDS CHIP FESTIVAL....Another huge collection.
M 216/7 RAF MEGA MIX 2 (2 DISK SET)....Good quality music mix.
M 226 DYNAMITE BEATS 4...Another very classy music disk from Max
M 230 DEXION PARTY MUSIC AND PICCYS....A good disk as always
M 232 ALCATRAZ MUZIC.....Classy presentation, 3 good tracks!!!
M 269 ALCATRAZ MORE THAN MUSIC. Superb.
M 311 LIONS: INXS (1 MEG) 2 tracks of remixed INXS.
M 314 MAG FIELDS: SPACED OUT 1 (1 MB) Beaty, housey music.
M 315 MAG FIELDS: SPACED OUT 2 (1 MB) More of the same. Good.
M 316 LSD: DON'T PANIC (1 MB) Well presented good sounds

ANIMATION SPECIAL!

The works of Tobias Richter. All require 1Mb.
H 002 Agatron Anim. 2 Misc - Jet fighter landing. Basic.
H 003 Agatron Anim. 3 Star Trek - Shuttle fly past.
H 005 Agatron Anim. 5 Star Trek - Klingon fires Torpedoes
H 007 Agatron Anim. 7 Star Wars - Fighter doing loops etc
H 009 Agatron Anim. 9 Star Wars - Fighter flyby. Impressive
H 010 Agatron Anim. 10 Star Trek - Enterprise in dry dock
H 011 Agatron Anim. 11 Tron - Tank vs Deaktivator. Good vectors
H 012 Agatron Anim. 12 Tron Animation. Not one of the best
H 013 Agatron Anim. 13 Misc - Robo 1. A robot waving.
H 014 Agatron Anim. 14 Star Trek - Workbee and Reliant. 3 Shots.
H 017 Agatron Anim. 17 Star Trek - TWOK Animation. Short but OK.
H 018 Agatron Anim. 18 Star Trek - Enterprise fly by. Short
H 020 Agatron Anim. 20 Misc - Huey the helicopter taking off
H 023 Agatron Anim. 23 Star Trek - Fleet Manoevre. Brilliant
H 024 Agatron Anim. 24 Misc - A pen signing 'Tevox'
H 025 Agatron Anim. 25 The Run. Superb car chase. A classic
H 026 Agatron Anim. 26 Misc - A ship rocking at sea. Poss Bug.
H 027 Agatron Anim. 27 Misc - A book opening!
H 028 Agatron Anim. 28 Star Trek - Shuttle and Enterprise
H 029 Agatron Anim. 29 Star Wars - Millenium Falcon in chase
H 030 Agatron Anim. 30 Star Wars - Millenium Falcon goes hyper
H 031 Agatron Anim. 31 Misc - Porsch rising out of a table
H 032 Agatorn Anim. 32 Space - Space probe flying away.
H 033 Agatron Anim. 33 Space - Space probe passing. Short.
H 034 Agatron Anim. 34 Star Trek - The Space Office. A bit short
H 035 Agatron Anim. 35 Space - Space probe flying away.
H 036 Agatron Anim. 36 Star Trek - Bird of pray loop de loop!
H 037 Agatron Anim. 37 Misc - Tobias goes knackers!

FISH, T-BAG, AND GLAMOUR DISKS

We now have all the FISH disks up to 520. The FISH AQUARIUM holds up to FF470, Beyond that is a Fish index disk. We currently have TBag disks up to 54. For contents of Fish, TBag, and all the other disks check out our latest catalogue disk. IT'S AMAZING11 (1MB only)
We also have a collection of over 50 glamour disks. 5 or 10 disk 'best selection' packs available on request.

GAMES

G 107 STAR TREK GAME Good graphic adventure, Best with 1 meg (2 disks)
G 117 EATMINE Addictive Boulderdash clone. (not A1500 etc)
G 133 PD GAMES COMPO Good selection inc Welltrix and Breakout.
G 136 DRIP Very tricky painter type game. Almost commercial quality!
G 142 PD GAMES COMPO 3....Great Pacman plus 2 others.
G 143 JEOPARDY (1 MEG)....Version of the board game Risk!
G 152 PD GAMES COMPO 9....Battlemech, Bullrun (Battle Sim) and more
G 154 BATTLEFORCE (1 MEG)....Strategy battle game.
G 159 ANTEP (1 MEG)....RPG also SLOTS, a good car chase game.
G 170 MEGABALL. The ultimate PD Breakout game?
G 171 ZEUS Simple but addictive puzzle game. Great.
G 175 CUBULUS. Great 'Rubics Cube' type puzzle. Excellent.
G 178 WIZZYS QUEST (1 MEG) Super game for PD. (Shareware).
G 179 LLAMATRON By Jeff Minter, blast the beasties (Shareware).
G 180 BLOCK IT 1.2 A tough but addictive puzzle game.
G 181 JT's GAME COMPENDIUM Some old, but most are new.
G 182 MENTAL IMAGE GAMEDISK 1 A superb compilation of new games
G 185 BLACKJACK LAB More serious than a game, inc tutor!
G 187 SUPER SKODA CHALLENGE (1MB) A Lada fun for 4 players.
G 189 NO MANS LAND (1MB) A good 2 player shoot each other game.
G 197 NBS GREAT GAMES VOL 3... Super new games
G 198 PATIENCE CARD GAMES..Superb games and graphics

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U 233 UEDIT Good Public Domain Wordprocessor.
U 267 ELECTROCAD DEMO (1 MEG) Circuit diagram design tool. No save in demo.
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U 616 AMIGA FOX Public Domain basic DTP
U 619 MESSYSID. Dreams answered. Working Messydos plus SID.
U 621/4 C-MANUAL. Latest 4 disk C Manual by Anders Bjerin.
U 629/30 COMMSPILATION. 2 Disks packed with modem utilities.
U 631 SONIC DEVELOPMENTS MUSIC PACK 3 Latest Trackers inc source
U 633 PRINTER DRIVER GENERATOR KIT plus over 50 drivers
U 638/9 WINDOWSBENCH V1.0 Nice workbench alternative
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U 644 PCQ PASCAL SHELL Easily used. Edit, assemble etc. Docs

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U 346 CLIP ART 6 Food and Drink
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U 349 CLIP ART 9 Birthdays, Xmas, Easter, New Year etc
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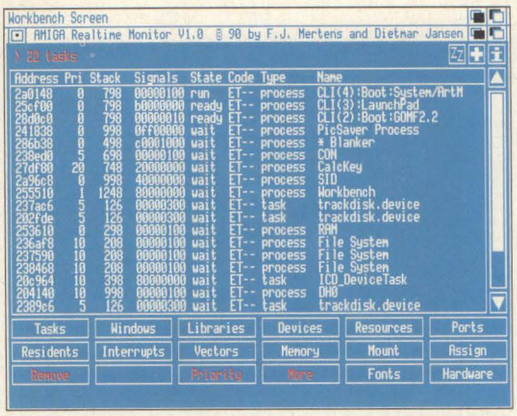


***ARTM* allows you to view the inner workings of the Amiga's powerful Exec system, and it's a joy to use.**

cont. from p22

this is a strip of gadgets which control the operations of *ARTM*. Each allows you to access certain types of information about your system.

You aren't just restricted to looking around your system. You can also carry out certain operations which allow you to keep your system under control, including such things as removing rogue programs and screens, modifying the priority of a task etc. All you have to do is click on the item to be manipulated and extra gadgets appear depending upon the type of item selected. So, for example, if you click on a task, three gadgets appear – Remove (kills the task), Priority (change the priority) and More (which provides more information about the task).

I've played with quite a few PD system monitors in my time, I can tell you, but *ARTM* is certainly the most powerful and comprehensive program available. It's easy to use, well designed and very well documented. What more could you ask? In all, *ARTM* is the best system monitor money can buy.

AMIGA 82%

Shareware Selection

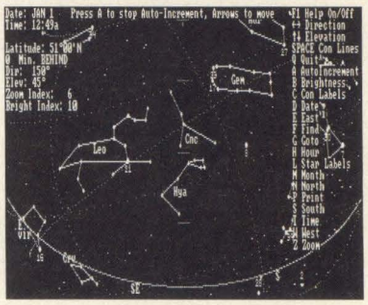
PC • £19.95 plus p&p
Benetech Systems,
21 Loughborough Road,
Leicester, LE4 5LJ
☎ 0533 611231

If you feel it's time to get a whole new bundle of software for your PC, then take a look at this pack from Benetech Systems. The *Shareware Selection Pack* is a collection of 23 disks, containing 89 files of highly compressed shareware public domain utilities, demo's, tutors, applications and such the like.

As proof of this pack's value, if you were to buy all the programs in an uncompressed format, you'd need a total of 88 disks to hold them! Now if that isn't value, then I'm the President of America!

The disks contain a good selection of applications including a number of powerful programs such as *AsEasyAs 4.0* (a spreadsheet), *DanCAD 3D 2.0* (a Computer Aided Design package), *PC-Write* (a very nice shareware word processor), Freeway's *Cashbook 4.0*, *In-Control* sales package and a handy *Calender/Scheduler* program.

The smaller utilities are varied, with such stuff on offer as RoBo's *Hard Drive Back-Up Calculator* (which tells you how many disks you will need to make a back-up of your hard disk), a program that gives you the ability to disable Ctrl-Break in the Autoexec file, an abundance of disk copiers (all of



***Skyglobe* is one of the most impressive of over 100 programs on the *Shareware Selection*.**

which appear to do slightly different things), a keyboard accelerator for 286 and 386 machines and much more besides.

For those of you after a route planning package, then there's even a demo of NextBase's *AutoRoute*. It doesn't do a great deal as it stands, but it remains an interesting little demo nonetheless.

Want to learn a new language? Well there's both a Spanish tutor and a touch typing tutor program on the disks. If you're feeling neurotic, or just plain silly, then you've got to check out *DrBrown*, a computer-simulated shrink (that's a psychiatrist to those of you who didn't know).

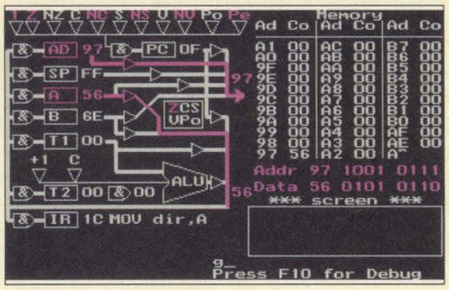
The program that intrigued me the most, though, is one that should be interesting, if not beneficial to all you astronomers out there. It is called *SkyGlobe* and displays the constellations of the galaxy as you would see them from your own home (or, for that matter, anyone else's home) at any particular time and date. Not only that, but it also automatically steps through the movement of the stars across the sky as time passes.

Compressed software usually means large amounts of hassle, but Benetec has taken the hassle out of the process of decompressing and installing software thanks to its

ASM14 & CPU24

PC • Fantasia Shareware
PO Box 1231,
Clutton, Bristol
☎ 0761 53716.

Getting into assembly language can be a daunting prospect for even the most hardened of coders. As any assembler language programmer will tell you, programming in assembler is a far cry from the simplicity of languages like BASIC. High level



Together ASM14 and CPU24 are a stepping stone between the real world of machine language and a simulated assembly language environment

languages take most of the hard work away from you, but with assembler it's your job to keep control over where your data is, where it's going and what it's doing, all at a hardware level. As you can probably already start to appreciate, any program that makes the task of coding in assembler a bit simpler has got to be a good thing.

As always, the PD libraries have the answer in the shape of *ASM14* and *CPU24*, two incredibly useful utilities from those nice people at Fantasia Shareware.

ASM14 is a command assembler for *CPU24* program. It has a command set similar to a limited Intel instruction set, meaning that it can compile simple assembly language programs. Once compiled using *ASM14*, your programs can then be run using the *CPU24* program. This program mirrors the basic functions of your Central Processing Unit (CPU), but does it in such a way that every instruction processed is shown flowing through a graphic representation of the CPU; next to this is displayed a map of the memory being used, allowing you to see what is happening internally. So, not only can you code in relative safety, but you also get the advantage of seeing exactly what is happening within the guts of your PC. Control of this program is achieved in a very similar manner to DOS's *Debug* program with options being executed with single key letters, such as G for Go (which would run your program).

This program is a stepping stone between the real world of machine language and a simulated assembly language environment. As a result, it's absolutely ideal for teaching potential assembly language programmers the basics of the craft or even just basic processor control. Hobbyists who wish to learn the basics of machine level programming will also find these programs useful.

Quick techy bit – *CPU24* uses data registers 'A' and 'B', a program counter, instruction register, 2 temporary data registers (ALU level), an address register, and a stack pointer. Hope that impresses the more specifications-minded of you out there. Good Value this one!

PC 85%

cont. p2

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ACO34 – Freeway LedgerMaster v1.0 (4)
ACO35 – Checkmate Plus v1.01a (2)
AC01 – Freeway Payroll v8.6 (3)

PC ART & C.A.D.

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APC42 – EGA Mouse Paint v4.0
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APC43 – Recursive Realm (fractals) v2.5
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APC31 – Draft Choice V1.51
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APC44 – T-Square v2.3 (4)
APC3 – PC-Key-Draw (4)
APC40 – EEDraw (electrical) (2)

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BPC51 – Share Genius v1.10s

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BPC45 – EarlyBird v1.0e
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BPC37 – Calendar Mate v4.1
BPC50 – Personal Calendar v14.20
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BPC54 – LeadMaster

PC COMMUNICATION

CR28 – GTPower v16.00 (4)
CR29 – ODYSSEY v1.42
CR31 – LOGICOMM (for OS/2) v2.025
CR14 – WildCat BBS system (2)
CR23 – AutoSig, compuserve front end v6.3a
CR24 – PC-Ham v5.32
CR13 – Morse tutorials

PC DATABASE

DB3 – WAMPUM v4.2 (UK version)
DB45 – PC-File v5.01 (3)
DB48 – ZEPHYR foxpro clone (2)
DB52 – SR-Info v3.41 (upgrade to vp-info) (2)
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DB4 – Mass appeal Mailing List Manager
DB53 – CATALIST v3.27 list manager

PC GAMES

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GPC126 – T-ZERO adventure v1.03
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GPC136 – Picture Puzzle v1.2
GPC134 – Moraff's SUPER BLAST
GPC135 – Moraff's ENTRAP v2.0
GPC140 – BUBBLE TROUBLE (vga/cga)
GPC88 – Captain Comic, brilliant!
GPC120 – VGA Catchem'

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MPC1 – Pianoman, compose your own music
MPC4 – Sequencer Plus (2)
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MPC11 – Melody Master v1.6
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PC CLIP-ART & PICTURES

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LPC7 – Screen designer (cga)
LPC63 – DialogPro v2.1
LPC67 – HYPERPAD v2.2
LPC73 – Screen World v1.1
LPC35 – TechnoJocks Turbo Toolbox v5 (2)
LPC69 – DOSREF 19 technical reference

PC SPECIAL INTEREST

SI-31 – Night Sky v2.08 (4)
SI-9 – Crossword Creator v4.3
SI-71 – Bible Reader, entire old/new test' (5)
SI-22 – GCSE Physics v2.1
SI-23 – GCSE Computer Studies v2.1
SI-118 – GCSE Integrated Science v1.1
SI-127 – GCSE Mathematics v1.1
SI-110 – School-Mom kids education v3.57
SI-51 – SUPERBEAM PC v1.35s
SI-122 – The Athletes Abacus v4
SI-137 – CV-Master, write your own!

PC SPREADSHEETS

SS2 – AsEasyAs v4.0 - the best
SS4 – PC-Calc+ v2.0 (3)
SS15 – INSTACALC v3.00 (pop-up)
SS18 – ALITE v1.0, newest program around

PC UTILITIES

UPC9 – AutoMenu v4.7
UPC125 – PowerMenu v5.32
UPC135 – Executive Director v2.09
UPC157 – Tree Top v2.44
UPC122 – PKZip & PKMenu
UPC129 – 4DOS v3.02
UPC25 – FlexiBak Plus v1.0
UPC144 – Turbo-Copy v2.01
UPC142 – FluShot+ v1.7 anti-virus
UPC145 – Graphics Workshop v2.2 (2)
UPC172 – MenuDirect Gold v3.0 (2)

PC WORD PRO'S - HYPERTEXT

WPC12 – Word Processor for Kids
WPC79 – PC-Type4 (4)
WPC101 – Galaxy Lite v1.7
WPC114 – Word Fugue v2.00 (2)
WPC4 – PC-Write v2.6
WPC70 – Hypershell v4.0 (3)
WPC117 – RUBICON DTP package v2.2c

PC WINDOWS 3.0

WIN1 – Paint Shop v2.02
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cont. from p24

comprehensive disk menu. This kind of user friendliness has to be applauded, especially when it is backed up by such a cracking good selection of programs. In all, *The Shareware Selection Pack* is £20 well spent.

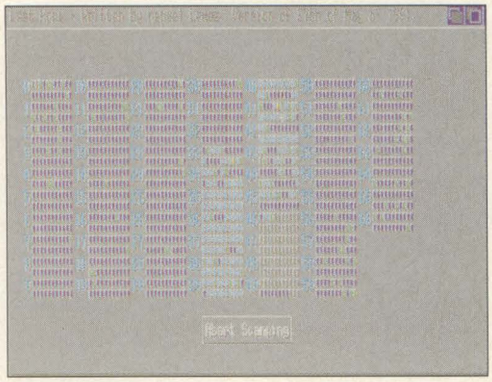
PC 88%

Last Hope

AMIGA • 17Bit Disk 1274
PD 17 Bit Software,
PO Box 97, Wakefield,
WF1 1XX
☎ 0924 366982

If you've ever accidentally erased a file from a disk, then you probably already know all too well how frustrating it can be trying to recover that lost file. Surprisingly, the standard Workbench disk doesn't come with an Undelete utility, so it's not surprising that PD authors have been quick to jump to the rescue.

As the name suggests, *Last Hope* is just that – it's your last hope if all other programs fail to recover that all important file. As a result, the author strongly recommends that you try something like the PD program *FixDisk* before running your valuable data through his program. This doesn't exactly instill me with confidence in his program, but there you have it.



There's nothing left for it. You've tried all conventional means of recovering that file, now your last hope's *Last Hope*.

Last Hope works on standard 880K floppies. It can't, unfortunately, handle either Fast File System floppies or even hard disks, so it's rather limited in its use. Fortunately though, it's extremely good at what little it does do.

On running *Last Hope*, it scans your disk showing the structure of the disk graphically. Any blocks that contain data are highlighted with unused blocks left a rather dull grey. This is really only a cosmetic feature as the real action doesn't start until all the disk has been scanned. Once this is done, *Last Hope* displays a list of files that it has managed to save. Unfortunately, if your file is corrupt then I'm afraid it can't help – for some reason known only to the author, any files that are even slightly corrupted are dumped immediately. I'm not entirely convinced by this approach – after all, it's better to rescue something rather than nothing.

On the whole, *Last Hope* does it's job remarkably well. It's not the most comprehensive file saver available, but for a quick and easy way of rescuing files from a corrupted disk, it does the job. In all, *Last Hope* is well worth checking out.

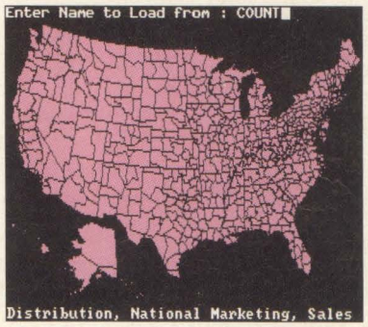
AMIGA 72%

Shareware Windows Pack

PC • £19.95
Benetech Systems,
21 Loughborough Road,
Leicester, LE4 5LJ
☎ 0533 611231

The *Shareware Windows Pack* is a huge collection of shareware utilities designed for use with MicroSoft Windows. Consisting of 15 disks, the pack contains 68 programs for Windows 3.0 and 37 programs for Windows 2.0. Here's a quick rundown of a couple of programs that I found particularly appealing:

Utilities are on offer in abundance ranging from printer drivers, graphics editing programs, various Desktop Managers, several communications programs and an MS Windows C programmers primer. One utility worth particular attention is *Sysrep*, a clever little program that produces a graph to show the current workload being placed on the Windows Command Processor.



A window on the world: there are over 100 programs on the *Shareware Windows Pack*.

Games are really for another section of the mag, but I just as well tell you that the disk also comes complete with a couple of very playable games including the classic *Lunar Lander* and a 3D *Tetris* game. Windows version 2.0 owners can also play their own versions of *Chess* and a devious little puzzle game. There are also some very impressive ray-traced images.

For all you fractal graphic fans out there, there's also a Mandelbrot plotter and a very pretty lava flow pattern generator (my, that sounds useful!).

If you're a Windows fan, then I strongly advise you to check this one out. Miss it at your peril!

PC 80%

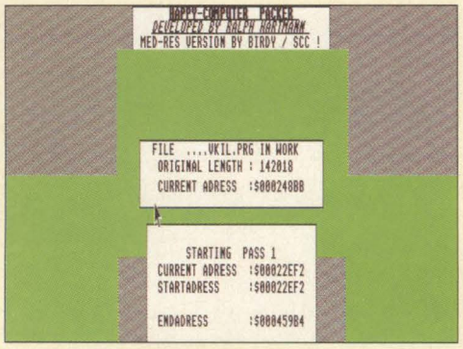
Happy Packer

ST • Util 94SE
Paradise Computers,
9 Westfield Crescent,
Brighton BN1 8JB

It might have a rather silly name, but the *Happy Computer Packer* remains the best program cruncher available for the ST. If you've ever wanted to cram a disk full of programs that amount to more bytes than the disk can handle, then a program like the *Happy Computer Packer* is the program you've been looking for.

It's a fairly simple program that has only one role in life – to take a program file and compress it as much as possible.

Crunching takes a fair old time, but once it's done the *Packer* then saves the file out to disk in crunched form. One very useful feature allows you add an option to the crunched file so that when it's loaded, the user is given the chance to save the file in uncrunched form.



There's nothing *The Happy Computer Packer* likes better than to crunch program files to half their original size.

Most file packers only allow you to decrunch files by running the file back through the packer, but the *Happy Packer* is different. To get it to uncrunch and then run, all you have to do is to run it like a normal program by double clicking on its icon. After a few seconds of hypnotic flashing colours, the program will be loaded and run.

Also included on the disk is an extra utility called the *Happy Packer Output File Editor* (or *HPOFE* to its friends). This clever utility allows you to alter the way that a file packed using the *Happy Packer* will appear during decrunching. It will also allow you to control whether the packed program can be saved out in its original unpacked size after loading.

Despite the fact that *HPOFE* was written specifically for use with the *Happy Packer*, it also supports crunched files produced by a number of other program packers including *ByteKiller 2* and *JEK Packer* and files packed by *LSD* and *WAS* (also known as *Automation*).

A program cruncher is always a useful utility to have in your disk collection and there's no better example than the *Happy Computer Packer*. Not only is it easy to use, but it crunches file to typically half their size and sometimes even more.

PC 78%

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...Programming & Utilities Round-Up...Programming & Utilities Round-Up...Programmi

MessyDOS 90%

Amiga •U619 • NBS

Programs which allow the Amiga to read PC and ST format diskettes are available commercially, but MessyDOS is the first available in the public domain. It allows you to read PC format diskettes from within any program that can access AmigaDOS devices. If you also own a PC, *MessyDOS* is very useful indeed.

IntuiMenu 2.0 88%

Amiga •1075 •AmigaNuts

IntuiMenu is a Workbench-based program that will allow you to run any program without having to find its icon first. It's a bit like the *LaunchPad* utility which is part of INOVAtronics' *HyperHelpers* package, but it's got one major advantage – it's a damned sight cheaper!

Words 84%

Amiga • 1073 • AmigaNuts

Words is a word-finding utility which will allow you to find anagrams of a given word, make words from a given word and it'll even guess a word when only a few letters are supplied. For puzzle fans this program is especially useful.

HAMSharp/Amiga GIFF 76%

Amiga • Amiganuts

CompuServe users will love this pair of utilities from Amiganuts. *HAMSharp* allows you to convert GIFF format images to IFF format and *AmiGIFF* will convert them back again. Processing is reasonably fast, especially when you compare it to a few of the GIFF converters already available in the PD libraires.

DrawMap 70%

Amiga • 2.3 • PD Soft

DrawMap is a powerful utility which allows you to generate hi-res maps of any part of the globe. The program stores its data in structured form, therefore allowing you to zoom in on any part of planet Earth without loss of resolution or detail. The maps themselves can then be saved out in IFF format.

QuickBase 75%

Amiga • 1068 •17 Bit Software

Databases are always too damned complicated for their own good, but *QuickBase* is the exception. It may not quite be up to *SuperBase* standards, but for quick and easy filing of such things as names and addresses, you'll be hard pushed to find a program that is as easy to use as this one.

Printing Press 76%

ST • 1577 • South West Software Library

Printing Press isn't quite powerful enough to be badged as a desktop publishing program, but it's fun nonetheless. If you've ever wanted to create simple posters and newsletters which contain text and bitmapped clip art, then *Printing Press* is worth checking out.

Document Displayer 82%

ST • UTL58 • Trust PD

The Desktop text file-viewing facility is a little naff to say the least, which is exactly where this utility comes in. Once loaded, you can pull in any text file and flick through it in any direction. Not only that, but it's got a number of useful additional features – blockedit and word search, for example.

Circuit Designer 72%

ST • UTL189 • East Midland PDL

There are a couple of circuit designers already available in the PD libraries, but this is by far the prettiest. It's not quite up to the task of designing complex circuits, but anyone doing a GCSE or A-Level course in physics or technology will find it very useful.

HardUp 80%

ST • AU0067 • Caledonia PDL

If you own an ST hard drive, then you just have to buy this disk. *HardUp* is a powerful utility which will allow you to back up your hard drive to floppy disk, therefore saving you from the heartache of losing your life's work when your hard disk dies. Check it out.

Amatuer Radio Disk 72%

ST • COM21 • FloppyShop

If you're into amateur radio, then this disk is a must. It contains no fewer than 16 utilities specifically written for all you amateur radio types. There are utilities galore which handle such things as beam headings, DX graylines, resistor colour decoding and coil turns.

German Translator 68%

ST • UT194 • Sphinx Software

Quite a lot of ST PD doesn't have English documentation, so this utility could prove useful. Simply by feeding it the German documentation, it reads through it and then writes out the English translation to disk. Don't expect a perfect translation though – some of the results are highly questionable!

ElfTree 88%

PC •Shareware Marketing

If you're after a PD alternative to the popular commercial directory utility *XTree*, then *ElfTree* is worth checking out. It'll graphically map out the directory structure of any hard or floppy disk and allow you to carry out a number of file management tasks such as copying and deleting files. In all, *ElfTree* is worth investigating.

Treeview 80%

PC • Shareware Marketing

Following hot on the heels of *ElfTree* is *Treeview*, a very similar program which will prove to be an absolute boon for hard disk users. Once again you can carry out a whole range of file manipulation tasks including all the usual copying, renaming deleting etc. Personally I prefer *ElfTree*, but you may think otherwise.

StupenDOS 74%

PC • Shareware Marketing

It may have a very silly name, but *StupenDOS* is a great little program if you have to manage large numbers of archived files. When used in conjunction with something like *PKZip* and *PKUnZip* (both of which are also available from Shareware Marketing), managing archives has never been easier.

Norad 70%

ST • Page 6 Library

Plots satellite positions on a global map. 97 satellites are listed on the disk and you can get information on them just by clicking on a digitised map. Useful if you have a satellite disk.

4DOS 85%

PC • Advantage Shareware

If you're totally and utterly fed up with the MSDOS command line, then this is the program to own. Not only does it give MSDOS full command line history and command line editing, but it'll allow you to enter multiple commands without having to press RETURN after each. I use this extensively on my PC. Question is, why aren't you?

PowerBatch 82%

PC • Advantage Shareware

If you're the kind of person who likes messing around with batch files, then *PowerBatch* is for you. Put simply, it's a very powerful program that can take a batch file and turn it into an executable program. Not only that, but it adds 35 extra commands to the DOS command set! Can't be bad!

DOSHelp 78%

PC • Shareware Marketing

DOS can be a complicated beast at times, especially for the beginner. *DOSHelp* is a very useful utility that adds an on-line help facility to your machine. At the press of a button it will bring up the syntax of any command, complete with an explanation of what it does.

DOS Technical Reference 80%

PC • Shareware Marketing

If you're looking for the ultimate guide to MS DOS, then this amazing book-on-a-disk is for you. Containing 575K of solid text, *DOS Technical Reference* contains information which will be useful to anyone ranging from complete beginners to the most hardened PC programmers.

MicroText 74%

PC • Advantage Shareware

MicroText is a program which, when used in conjunction with a printer, will allow you to print four pages worth of text onto a single page. It does this by dumping its own minute font to your printer which increases the amount of characters which can be printed on a page.

MOD Pro 1.8 72%

Amiga • 988 • Amiganuts

If you've got lots of music modules all composed in different packages and you want to hear them playing in the background while you work on your workbench then this is the package for you. Most of the major music creation packages are supported, including *MED*, *Soundtracker*, *ProTracker* and *Noisetracker*.

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780 Exorcist Virus disk
782 Dungeon Master Solution
784 Bowl V2
785 Opti Utils (every possible util you can think of using)
793 Jazz Bench (replaces WB)
798 Ozone (another collection of utils by Garry Henderson)
804 Master Virus Killer v2.0
817 Noiseplayer (background)
838 Trial + Error
885 Sound Effects
894 Master Virus Killer 2.1
897 RSI Demo Maker
916 Ham Lab (chop up your own pictures)
918 Med v3.0 (the best music util)
925 Disk Immune (virus killer)
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1113 Games Galore 6
1071 Crossword Creator
1069 Atic Atac (written in Amos)
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1056 Battle Pong (silly fun)
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1206 PMC Alpha Omega (good)
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What the hell is PD anyway?

Public domain is free software. What a brilliantly simple concept. Well, yes, but things are a bit more complicated than that. There's a bewildering number of libraries offering a perplexing number of variations on the PD theme: shareware, freeware, licenceware. What does it all mean?

Never fear. Adam Waring is here with the definitive run down on what the public domain has to offer...

You can't get something for nothing, as the old saying goes. Or can you? You can with public domain software. PD software is entirely free. Anybody can have a copy of a PD program, without paying a penny for the privilege. You're free to pass on PD software to your friends – or enemies – without fear of infringing any copyright laws because there is no copyright. Public domain means exactly that – it's for the public to do with as they choose.

Although you're welcome to make copies of PD software, and distribute them in whatever way you like, the whole ethic behind PD means that you should not make any money out of doing so. You can obtain software from friends by simply popping a disk in their disk drive and running off a copy. You can download PD software directly on to your computer from a bulletin board – as long as you have a modem, that is. PD and shareware libraries offer a mail order service where they copy the software for you – for a price, of course!

PD libraries are not allowed to 'sell' you software, and indeed they don't. The money they charge is a fee for copying the programs on to the disk for you, not for the actual program itself. Nor are they supposed to profit from distributing public domain software. And no reputable library does. The money charged goes on disks, jiffy bags, catalogues and advertising. Any money left over goes straight back into the library's resources.

Mad, or what?

Why the hell do they do it? What's the point of spending the enormous amount of time required to write a program only to give it away? Are these people mad, or what?

After all, anyone who has ever taken the trouble to develop any heavy duty program will be well aware of the time and effort involved in producing anything decent. Weeks, if not months, need to be spent, so why do it when you get nothing for your efforts at the end?

Well, they may not receive any financial remuneration, but there are other forms of 'reward'. These people *are* mad – mad about their machines. The reward is what they've achieved from spending every waking hour slaving over a hot keyboard: something that's theirs; something they've created; something that they're proud of.

And if you've created something like that, why not share it? The fact that your program is being used all over the world can give quite a buzz. But even so, why not sell it and get a few bob for your efforts?

There are many programs that you simply couldn't sell. A printer driver for an obscure, discontinued serial printer isn't going to achieve a huge market. But it would be extremely useful to people with the same model. A game might be unmarketable through the normal channels, having to compete against film licenses and arcade conversions, but it may have addictive qualities you simply can't find in more 'advanced' games. A horoscope prediction program may be great fun to play around with, but would you pay 30 odd quid for one?

"You're free to pass on PD software to your friends without fear of infringing copyright because there is no copyright."

But the biggest driving force behind PD writers is enthusiasm. Once you get into programming, you don't want to stop, and if what your producing won't sell, then so be it. The public domain is *your* channel of distribution.

Why buy PD?

That's what PD is, but why should you buy it? Well, it's free for starters! The most you'll pay is a couple of quid for a disk crammed full of software.

But what sort of software can you find? Everything you'll find available commercially – and much more!

There are plenty of programs that you'll find nowhere else but in the public domain; programs with little commercial value, that prove to be invaluable all the same. This is not necessarily because they're too specialised to be of general use – though that often is the case – but can be because it's the sort of thing everybody wants but nobody is

cont. on p32

cont. from p31

prepared to pay for. A mono emulator for the ST is a good example. This utility lets a colour monitor owner use programs that would normally be mono only. Nothing you'd really consider buying, but great for running all those mono-only PD programs!

PD or not PD?

This software-for-nothing lark is all well and good, but not all software you'll find in the books of public domain libraries is actually free.

There are a number of varieties of nearly-PD software that are distributed by the same sources – the libraries and bulletin boards and so forth. True public domain software *is* completely free of copyright and you can pretty much do what the hell you like with it. All the PD variations have their copyright retained by the authors.

Here, then, is the *Public Domain* guide to all those 'almost-but-not-quite-PD' programs that we will be covering in the magazine.

Freeware

The majority of public domain software is actually freeware. Freeware means 'freely distributable' software. The author always retains the copyright to the program, and has merely given permission for the program to be copied for no financial gain. There are a couple of golden rules that generally apply to freeware. The program must not be altered in any way, it cannot be modified or incorporated into other programs and it must be distributed with all the documentation that the author provides.

In fact, a program's author may impose whatever rules they like, and you must abide by them. The documentation file that accompanies most programs will list any deviations from the norm.

Shareware

Shareware is a hugely popular form of software that's come to be associated with the public domain. It operates on a sort of 'try-before-you-buy' system. It is distributed in the the same way as PD. Also like PD, you may pass copies along to whoever you like. Shareware tends to be of a more professional standard than public domain (though not always). In fact, some shareware programs can rival commercially sold products for quality – only for a lot less moolah!

The difference is that you have to pay for it. You're initially allowed a trial period in which to evaluate the software, and decide whether it's for you. When this period expires, usually in around a week, you must either get rid of the software, or pay a registration fee to the program's author. The amount is usually still fairly low, certainly much cheaper than conventionally available software (where distributors, retailers and other such middlemen swallow half the profits, not to mention the costs saved by not needing packaging). The author's details are usually found somewhere on the program disk, in a READ.ME file or somewhere similar.

"Shareware programs rival the quality of commercially sold products – only for a lot less money."

Of course, there's nothing to stop you from keeping the program without sending off this shareware fee. But it is illegal – shareware is governed by the laws of copyright, and you must pay the enrolment fee if you wish to use it outside the registration period. Then again, breaking the speed limit is illegal too, but everybody does it. It's not necessarily through downright meanness that people don't pay for shareware. More often than not it's because they simply can't be bothered, or it slips their minds and they end up forgetting about the whole thing.

So shareware authors have a few tricks up their sleeves in order to encourage the punters to actually pay for the stuff. A lot of shareware is continuously being updated, and registered users are often sent the latest updates automatically, as and when they become available for free, or at very little cost. Another popular method is to provide full, professionally printed documentation to registered users, or a helpline service for those technical troubles you may encounter.

But whether incentives are supplied or not, you should make the effort to pay for programs that you keep. There are the moral reasons. Someone has put

All right, I'm convinced! Where do I get it from?

Can it all really be for nothing? Yes. If a someone you know has a snazzy little PD program that you wouldn't mind adding to your collection, then you're perfectly entitled to take a copy without owing anybody anything. That's not the way that most PD is distributed, however. The chances are that there's a program out there somewhere that does *exactly* what you want, but won't be available from your buddies. Then you have to look further afield to get hold of your free software.

Should you have a modem, then you'll be able to hook up to a bulletin board and download software directly (see our feature in this issue). This, too, will cost you nothing directly. (Though you may notice an alarming increase in your phone bill!) Not everybody has a modem, though.

The third, most accessible, option is through a PD library. PD libraries have huge collections of software, amounting to many hundreds – or even thousands – of disks. Whatever it is you're after, any decent sized library will have something that fits the bill in its books. Most publish a catalogue of some sort to make it easier for you to find the programs you want. The catalogue can be on disk, which you load into your computer can then browse through an inventory that appears on screen. The bigger public domain libraries publish printed catalogues, which makes choosing your software even more convenient.

Once you've chosen your software, you simply send off your order, along with your money, then sit back and wait for the postman to pop a package through your letterbox.

Just one minute. Didn't we say that PD software was free? What's all this sending off money about then?

Libraries *do* make a charge for copying disks, but the software is still free. They do not charge for the software itself. It's a service charge: they have amassed a large collection of software, and are willing to copy it for members of the general public. All this places huge demands on the librarian's time.

They have material costs too. There's the price of the blank disk, the postage, the upkeep of equipment, the printing of catalogues and the cost of advertising to take into account.

The cost of public domain from different libraries does vary considerably, though. Some charge under a pound, while others ask for three times that. How can such differences be justified? Well, a lot of it comes down to professionalism – though don't take it as read that a more expensive library is necessarily better than a cheaper one: there are plenty of excellent libraries offering a good service at a competitive price.

If a library is turning over thousands of disks a week, then the likelihood is that it will need to employ full time staff to process orders. Staff need to be paid, and the benefit to the customer is that there's always someone at the end of the phone willing to offer help and advice.

If you're happy with the service you get with a particular library, then that's fine. There are plenty of them out there, and at PD prices you can afford to shop around and deal with the library that offers you the best service.

Don't forget the reason why people actually run PD libraries. It's not (generally, at least) a desire to make a quick buck; if you're in it for megabucks, there are plenty of easier, less demanding ways to make money. More often than not, it's enthusiasm. A love for their machine, and a desire to see public domain and shareware spread to people who will get a real benefit from it.

a lot of time and effort into creating the program that you use. It's only fair that this person should be rewarded for their hard work.

Then there's the legal aspect, as mentioned before. You're breaking the law if you don't pay the sharware fee outside the registration period. And if that doesn't sway you, there's a purely selfish reason; if a sharware author has doesn't receive payment for their efforts, then they're going to get sick of working for nothing, and ain't gonna write no more.

Paying, on the other hand, will encourage these guys to carry on coding. It'll make them feel all warm inside, and they'll think the world isn't such a bad place after all. (It'll give them some well deserved beer money too!)

Bannerware

Bannerware programs are like demos; you get to play with the program, but usually some major feature has been disabled. For instance, you may be able to draw to pixel perfection on an art package, but not be able to save your work. Or a program may be set to self-destruct after ten uses.

So, after you've been convinced that you can't live without a fully working version of this piece of software, you'll be wanting to buy it. Much bannerware operates in exactly the same way as shareware; you send off the fee and in return the fully fledged program is sent to you. Other, more expensive commercially available packages are distributed in conventional manner, and are available through retail outlets. An example of this is *Protext* from Arnor, which was released with a severely limited file size – just about enough to send a thank you letter to your granny. When it came to writing *War and Peace*, though, only the full version would do.

"There simply isn't a better way to advertise a product than through bannerware. You can't beat giving a taster of what's to come."

However it's eventually sold, there simply isn't a better way to advertise a product than through bannerware. You just can't beat giving a taster of what's to come.

Charityware

Charityware is halfway between public domain and shareware. The programmers don't want a penny for their efforts, but they *would* like you to pay for it. All they ask, in the way of payment, is that you donate a few quid to charity.

You may be asked to send a specified amount to a named organisation, or it may be left up to you to chose the sum and benefactor. Either way, doesn't it just restore your faith in human nature and make you feel good about the world?

Licenceware

Actually, licenceware isn't PD at all. It has more in common with commercially available products that you see in shops. It's cheap, usually not much more than the price of standard PD software, but it's copyrighted and sold for profit. Libraries are simply used as a way to distribute this software. For every licenceware disk sold, a royalty is paid to the program's author. Licenceware tends to be sold through selected libraries – they have to be granted the rights do distribute the disks.

Most importantly, you must not give copies away to your friends – if they want a copy then they have to order it for themselves from the PD library that supplies it.

Giftware

Everything's fairly straightforward so far? Good, because from here on it goes rapidly downhill. It just gets silly. Giftware is what started it all. PD programmers who didn't want monetary reward for software, but wouldn't mind a token of your appreciation. They said that you're welcome to copy their software, but if you liked it, a small gift would be warmly received. It didn't need to be expensive, just something to show that there were people out there who were listening and were grateful. It was for the feedback more than anything.

Then someone decided that they liked chocolate. So chocolateware *was* born. Unsurprisingly perhaps, beerware followed rapidly, which doesn't really need a description. Whatever next, eh? PD

It may be free, but what's in it for me?

For virtually every program that's available commercially, you'll find an equivalent in the public domain (and lots more besides). In every issue of *Public Domain* we intend to tell you what's going on *in* the public domain!

We will do our damnedest to keep you up to date with all the latest programs released. But there are many thousands of programs already in the public domain, so we'll let you know about those old gems too.

Of course, you could define categories for the different types of programs in a million different ways, but, for the purposes of our reviews, we've plumped for five sections. Each field is headed by its own expert editor. They go something like this...

Programming and Utilities

This is the real meat of the Public Domain. A thousand authors have created a million little utilities that are all invaluable in one way or the other. There's something here for everyone.

Programming is also covered in this section, and you'll find assemblers, tutorials and implementations of full-blown languages. Who knows? perhaps you'll be donating stuff to the public domain before too long!

Games

No matter how much of a 'serious' user you are, everyone likes to have fun! Whether it's a five minute blast on a shoot-'em-up, or a good couple of hours with a chess game, it does us all good to relax every once in a while.

There are contless games in the public domain. This is where you find out which ones are worth plugging in your joystick for.

Demos

One of the most popular, yet arguably the most useless, category of PD programs is the demo. A demo serves no purpose. It doesn't do anything useful, you can't 'play' it, interaction is limited to altering the speed it runs at, if anything. The sole purpose of the demo is to entertain.

Most demos are a mix between music and graphics, almost always containing elements of both. But it's also more than that: it shows off the skills of the programmers, composers and artists like nothing else. If you're looking for real technical innovation, to see your machine taken to the edge of it capabilities, then the demo section is where you'll find it.

Business

Why spend a ton on a word processor, when you find one in the public domain just as good for next to nothing?

This section's where we evaluate all those 'applications' programs. Spreadsheets, databases, DTP. You'll find versions of all the the types of programs used in the day to day running of Britain's businesses in the public domain and shareware libraries.

Home and Educational

All those fiddly 'miscellaneous' programs go here. Pools predictors, wordsearch generators, cookery databases. Programs that generally find their best use in the home will find their way into this section.

And you'll also learn something! Educational programs – for both young kids and adults – will also be reviewed among these pages. Everything from simple addition programs for the under-fives to touch typing courses.

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0857 Clip Art
1078 Essential Utils 2
0659 Essential Utils 1
1146 Icon Magic
1151 C - Light

DEMOS

1117 Budbrain Megademo
0439 Fantastic Demos
0587 Brainwave
0559 Deadly Pursuits
0993 Hellish Megademo
1337 Sam Fox
0933 Mike Tyson 1 meg
1355 Techno Flight
1142 Amaze
1460 Do The Bart Man
0591 Flimbos Quest Demo
0454 Dragons Megademo
0469 Beastie Boys Demo
0593 Thunder Birds Demo

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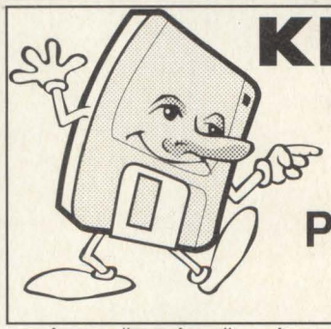

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Going for a song

MED is a powerful music creation program that allows complex tunes to be developed from simple 'building blocks'. Graham Clarke shows how anyone with an Amiga can get the best from it.

Forget *Soundtracker*, throw away *Noisetracker* and treat yourself to some *MED* magic instead. *MED3.11b*, the latest version of the classic music creation package for the Amiga, will have you jammin' night and day. Even if you're not usually into making music *MED* is well worth a try. It is one of the most comprehensive and professional programs to be released as shareware.

MED is an acronym for Music EDitor. It's a program that allows you to create impressive music by breaking music writing down into a series of simple steps in a similar way to the commercially-available *Soundtracker* program. A song is made up of seveal parts called blocks, each block containing a potential 16 tracks. This means that up to16 notes can be played simultaneously, one for each track.

On the right track

The first four tracks in a block are normally played through the Amiga. If you have some MIDI equipment then additional tracks can be used to control keyboards, drum kits or even tape recorders.

Note, octave, instrument and the control codes are displayed for each track. This notation leads to extremely fast and uncluttered editing as *SoundTracker* pros will be no doubt agree.

Samples are the key to musical success on the Amiga. Not only does *MED* allow you to use samples but it also contains a built-in sampler/editor with features rivalling some of the high cost packages. It doesn't stop there, because you also have control over two new types of instrument: Synthsounds and the oddly-named Hybrid sounds.

Synthsounds are created using a built-in editor. They tend to sound like C64 music – not a bad thing considering the C64 is still chucking out some pretty funky stuff. Synthsounds have many advantages over samples. They don't suffer from hiss, are totally controllable and use very little memory. Rather than storing thousands or measurements, as with samples, a Synthsound is typically less than 1K in size!

Built in to the Synthsound editor is a simple programming language that can be used to create even more complicated Hybrid sounds. Hybrids are modified samples, which allow interesting effects to be applied to an instrument.

Once you've created a selection of sounds, editing your music is only a mouse-click away. The main screen is split into four sections. The top right of the screen contains 14 icons, each of which brings up a menu on the screen. Options are available for everything from editing to transposing.

The centre normally displays the main work screen which contains all you need for basic music editing. But you can also select three other control screens from the menu to the right of the screen:

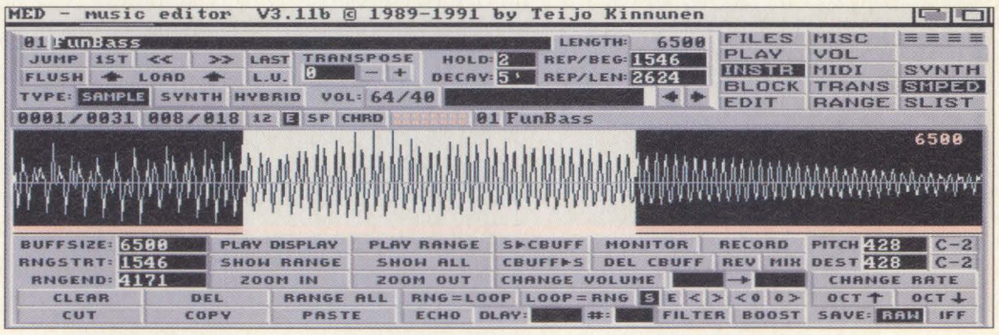
- SYNTH – Real sound creation happens in this menu – waveforms are drawn, mixed and played.
- SMPED – Samples can be recorded, looped, filtered, echoed and boosted. When you've finished, the sounds you've created can be used in your song.
- SLIST – This part of the program can be used to contain a database of all the sounds on your disks. Selecting a sound automatically loads it from the correct disk.

The bottom area contains two graphic equilisers, one showing the instruments being played, the other displaying the pitch.

The latest version of *MED* is the product of over three years of refinements made by author Teijo Kinnunen. And they were worth the effort because *MED* is one of those PD programs that make you wonder why you bother with full price software.

MED3.11b is available from Amiganuts United. ☎ Give them a buzz on (0763) 785680.

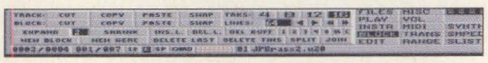
cont. on p36



The central area of MED's display can be changed to any one of four control screen, such as the SAMPLING screen above.

Find your way through the menu maze

MED contains a bewildering amount of menus and options. Here's a little peek at what's on offer:



BLOCK – This menu controls some cut and paste functions, allows blocks to be changed in length and activates tracks.

MISC – Colours can be changed, the song can be cleared and you can exit the program from this menu.

EDIT – Used to select the octave you want to play in and the tracks you wish to play.

PLAY – Here you can describe the order in which blocks will be played, change the tempo and play the song.

FILES – Allows songs and sounds to be loaded and saved. You can also delete unwanted files from your disks.

RANGE – If you have recurring phrases in your song, rather than rewriting each part this menu lets you cut and paste.

INSTRUMENT – Allows you to load sounds, transpose individual instruments and change the volumes.

TRANS – Short for transpose. You can move any part of the block up or down in pitch.

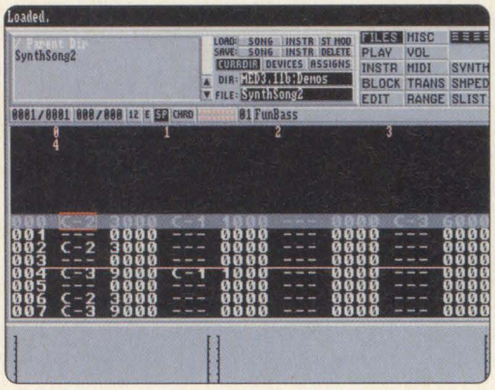
MIDI – If you have a MIDI instruments this menu allows you to control them directly from *MED*.

VOLUME – Allows you to control the loudness of each individual track. Master volume affects all of them.

cont. from p35

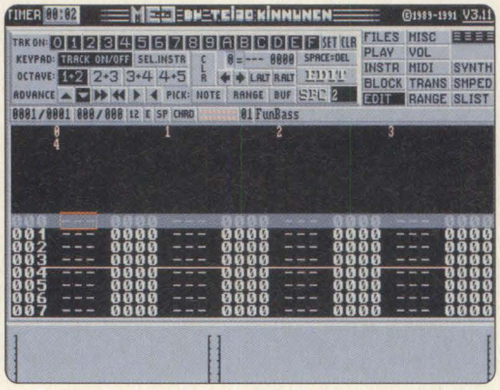
Twelve simple steps to

At first glance, the amount of menus, icons and buttons may make *MED* seem a bit



1 Once *MED* is loaded, click on **DF0:** from the device list to bring up a list of all the files on disk. A quick way to load in several instruments at once is to load a complete song and then delete it, keeping the sounds in memory (this saves you having to define your own sounds, which is a complicated business).

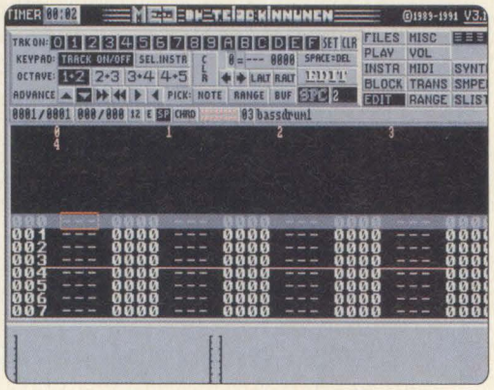
Select **Synthsong2** from the Demo folder and then click on **LOAD: SONG** from the upper menu bar. Before you start you must wipe the song data from memory, keeping all the instruments. Select **MISC** from the main menu and then click on **CLEAR SONG ONLY** followed by **CONFIRM**.



2 Now that the samples are in memory, you need to lay down a basic drum beat that will keep all the other tracks in time. The **SPC** feature sets the interval between each sound laid down on a track, automatically keeping them all to a regular beat.

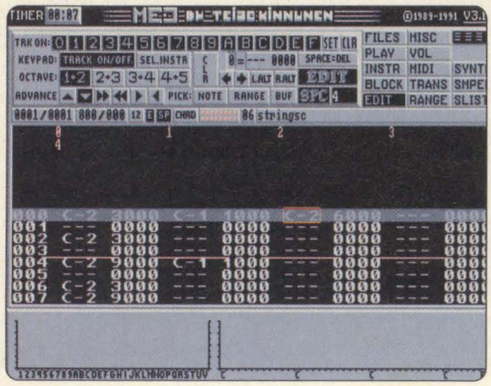
Click on **EDIT**, a new menu panel will appear. Near the bottom right of this panel you will find the letters **SPC** followed by the 'spacing' between notes.

You need to make sure that this number is **2** for recording your percussion track (It should be set to this already, but it's just as well to check). Click on **SPC** to activate the spacing.



3 Having sorted out the timing, you need to select the correct instrument to use on your percussion track.

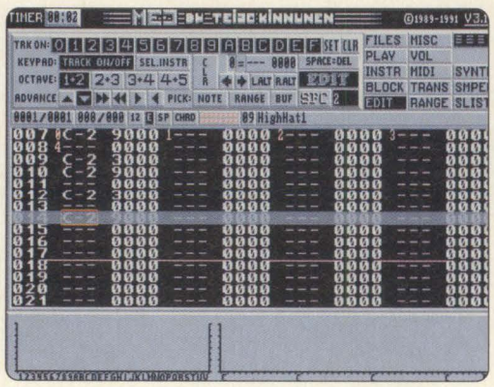
Near the centre of the screen is an information bar, the right side of which displays the current sound which you are using. **01 FunBass** should be displayed – not much good for a drum beat! Change this to sample **03 BassDrum** by clicking on the instrument number with the left mouse button. This moves you forward through the sample list. Should you go past the instrument you want, the right button moves you backwards through the list.



7 The next step in the process is to add chords to the block. Chords are made up of several notes played simultaneously. They provide a backbone to the tune and should harmonise with both the lead and the bass.

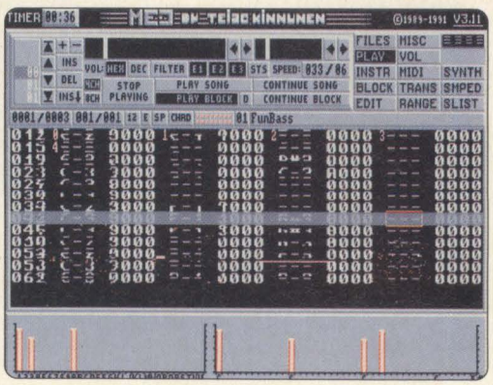
The samples **06 Stringsc** and **07 Stringscm** are actually recordings of three notes being played as a chord. This means that when you use them, only one track will be taken, although it will actually *sound* like three are being played.

To add the chords select **06 Stringsc** and move the cursor to the start of track three, then press the following keys: **F6 q F8 r F9 t SPACE**



8 Now for the hardest part: the melody. Trial and error is the best way to create this part of a song. You'll just have to tinker around until you're satisfied with the results.

Change the instrument you are using to **0A Synthorgen4 (+ saw wave)**, you will use this to create your lead. Next set **SPC** to **2**, and make sure that it is turned it on. Then press **F2** to change the octave that you are playing in, and with the cursor at the start of the fourth track, press the following keys to insert the correct notes: **q DEL 3 q 3 r DEL q DEL 3 DEL q 3 DEL r r DEL t r t 6 DEL 6 DEL t DEL r t DEL t**

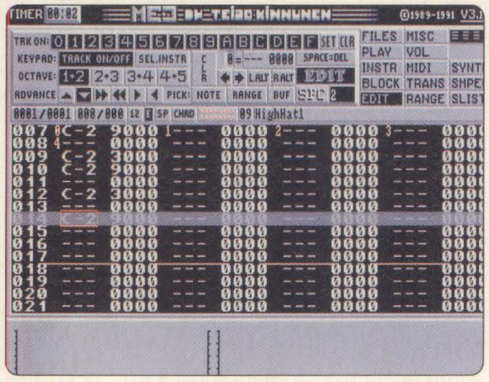


9 The next step is to set the correct volume levels for each sample. This can be done in three ways: changing the volume of each sample, changing the volume of each track or by changing the volume of each recorded note.

Change the volumes of the samples by selecting **INSTR** from the main menu. Use the double arrow icons to flick through the available sounds. When you arrive at the sound you want to adjust use the volume slider at the bottom of the menu to change its loudness. The volumes used are a matter of taste – personally I like to have the drums and bass booming out of the speakers!

being an MED maestro!

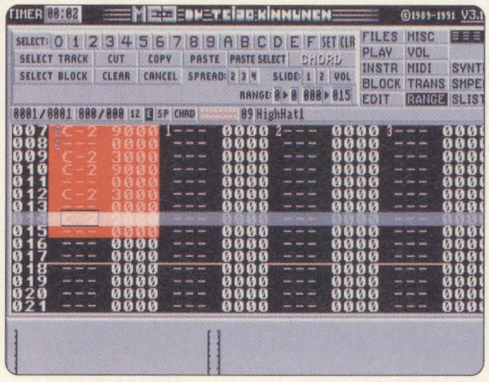
of a nightmare. Graham Clarke's step-by-step guide makes it a dream!



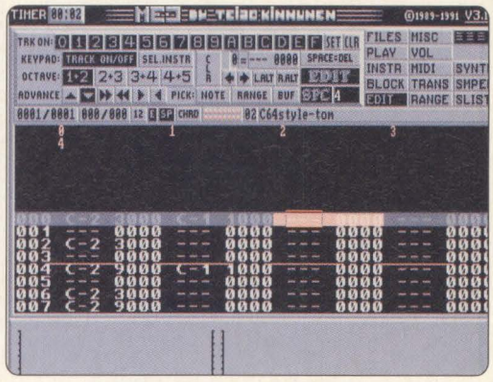
4 Use track 0 for the percussion track. With the cursor keys, position the cursor at the start of the leftmost track. Press **ESC** to turn editing on, then the following sequence of keys to place the first part of the bass drum pattern into position:

q q Del q Del Del q

Having done that, click on **SPC** to turn the spacing off and add an extra beat on step 9 (by positioning with the cursor keys and pressing **q**). Change the instrument you are using to **09 HighHat1** and place HighHat sounds on steps 4, 7, 10, and 14 (again with the cursor keys and **q**).



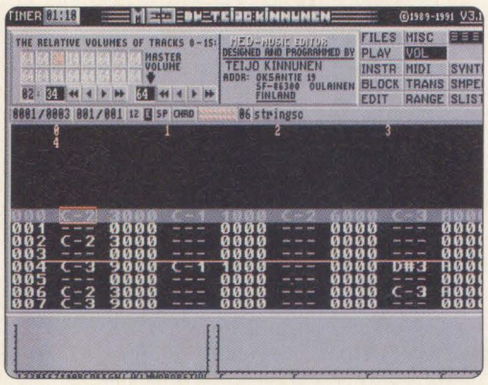
5 Having created a 16 step beat you will still not have filled the whole of the 64 step track. Do this by repeating your drum pattern four times on every block. Click on the **RANGE** icon to activate the Cut and Paste menu. Highlight the first 16 steps (numbered 0 – 15) of the track by clicking and dragging with the right mouse button. Select **COPY** from the menu, move the cursor down so that it is on the 16th step and then select **PASTE**. The 16 steps will then be repeated. Do the same for the 32nd and 48th steps. Pat on the back – you've completed the drums section!



6 Now that the drums have been safely recorded, it's time to add some other instruments. The bass line is next on our list.

Change the sound you are using to sample **01 FunBass**. Use the cursor keys to move to the top of track 1 and select **EDIT** from the menu. Set the **SPC** number to **4** and activate it. Press **z** on the keyboard eight times, then change the **SPC** to **2** and press **v** eight times. Finally change the **SPC** spacing back to **4** and finish the block off by typing: **b b v b**

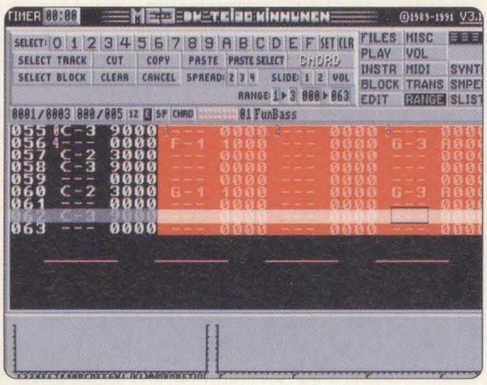
This has created a fairly simple bass line which will go in harmony with the rest of our tune.



10 You've now finished the first block, but there's still work to do. A song is made up from several of these blocks 'stuck' together.

Select **BLOCK** from the main menu and click on **NEW BLOCK** twice. These new blocks are empty. On the menu bar is a box which contains the numbers **000/002**. The first number is the block you are looking at, the second is the highest of the blocks in memory.

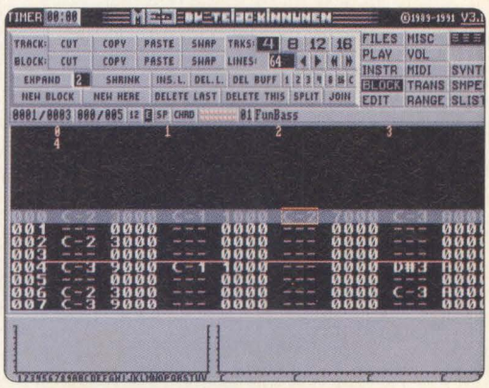
Then select **BLOCK: COPY** from the upper part of the panel. Select the next block by clicking on the **000** with the left button. Now click on **BLOCK: PASTE**. Repeat this to fill both newly created blocks.



11 Now all you have to do is create an intro, starting with the drums and bass before launching into the full song.

First you need to create a shorter drum-only track. View block zero by clicking on the **002** twice with the right button. Click on the left arrow next to the **64**. Carry on 'til this is reduced to **32**

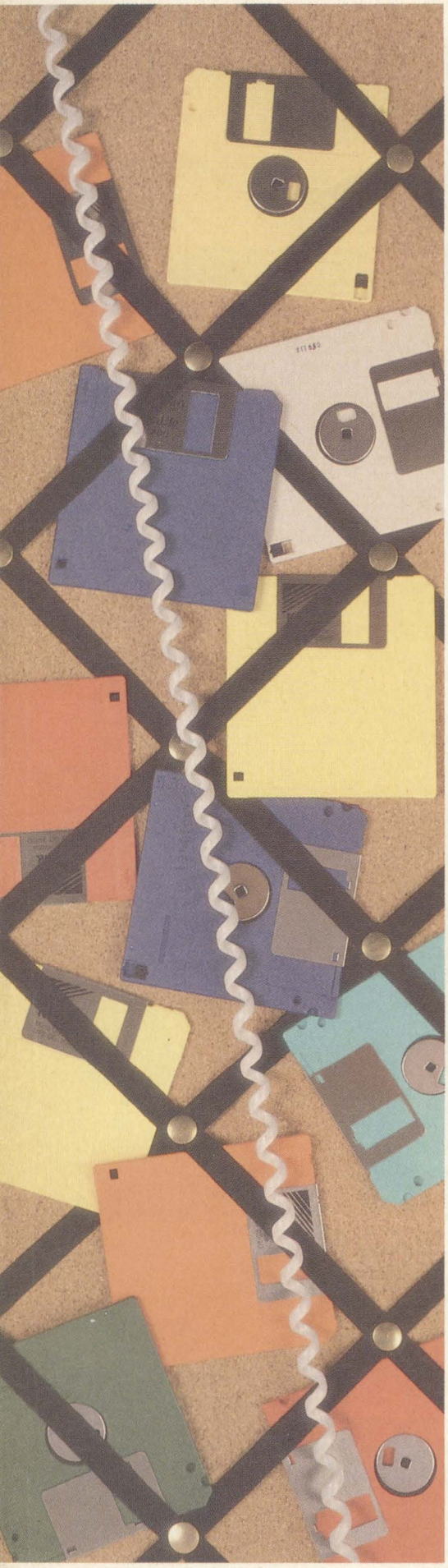
Select the **RANGE** menu and highlight *all* of tracks 1, 2, and 3 by clicking and dragging with the right mouse button (leave track 0 alone). Click on **CLEAR** to erase these tracks. Next view block 1, move the cursor over to track 3 and click on **SELECT TRACK**. Then wipe it by clicking on **CLEAR**.



12 You have three different blocks, comprising block 0, a drum-only intro; block 1, which adds bass and chords; and block 2, the full blown tune. Stick them together and, hey presto, you've created the full song!

Select the **PLAY** menu and click on the **INS** icon three times. Several **00**s will pop up in a small box to the left. Click on the down arrow to select the second **00** and use **+** to change it from **00** to **01**. Then change the next two **00**s to read **02**.

That's it! Your little song should be ready. All that remains to do is sit back, click on **PLAY: SONG**, and listen to the masterpiece! PD



Software just a phone call away

Why sit around for days, even weeks, waiting for the postman to deliver those PD disks you ordered from a library when there are thousands of games, utilities and applications available over your phone line in mere minutes? Asam Ahmad guides you through the world of comms, an alternative source of PD software...

Tracking down the precise PD software you want can be a tricky business. The most common way is through mail order PD libraries or going down to a computer show and checking out PD companies' wares at their stands. If you're really lucky you might have access to a computer shop that handles PD.

The problem is that with all of these methods even if you find a disk in a collection that appears to fit your needs, it can be frustrating to load it only to find that it isn't quite what you had in mind. Worse still, floppy disks have a nasty tendency to produce read/write errors just when you thought it was safe to write enable them...

Enter the world of communications.

An Alternative Source of PD

Comms as a means of obtaining PD Software can be an expensive business, possibly involving some rather pricey hardware and hours stuck on a phone line. On the other hand, if you know what you're doing and exactly what you're after it can be the most economical, not to mention quickest and least frustrating way of obtaining specific pieces of software – indeed, PD libraries themselves often get their latest material from bulletin boards.

A bulletin board System (BBS) is an electronic centre for information exchange. You can find all kinds of things on a BBS – everything from news on the latest product releases to sections on mountain biking. There's even a dating agency available. They can also be used as a way of contacting other comms users through electronic mail systems.

However, possibly the most exciting thing about BBSs is the vast amount of PD and shareware also available, ranging from virus killers to game demos, graphics to business software. In fact, everything you would expect to find in a PD library – with the added benefit that the latest versions of many utilities are frequently released onto larger subscription on-line services long before they find their way onto PD disks. All the programs are usually split into categories and stored in separate areas on the board's file system.

First contact

Getting connected to a remote system can be a difficult task for the comms novice. There will be problems that you'll encounter, but perseverance will get you successfully logging on to a board.

Apart from your computer and a phone line, you will need terminal software and a modem. Terminal software translates whatever you type into electronic data that is sent to the computer's RS-232 serial or modem port. These signals are then modulated into a form suitable for transmission over a telephone cable by the modem connected to the serial port. On the other end of the line will be another modem, demodulating the information back into signals that the terminal software on the receiving computer understands. This is how the name modem (MOdulator/DEModulator) came about.

Having obtained your equipment, it's time to set it up. This is the area in which most of the problems you'll come across will arise. The first thing to do is to find a board list. A board list, like a file list, tells you

important information about how to connect to the host system. Specifically, the list will tell you the transmission configuration and data speed at which the board is able to communicate. You have to inform your terminal software of these setting – called such daunting things as PARITY, BAUD, START and STOP bits and DATA bits – but this is usally a fairly simple and straightforward process.

Once your equipment is set up, the next stage is to call the board. Normally, you do this from your keyboard, and the terminal software then automatically instructs the modem to dial the number. These are called auto-dialling modems. With a manual dialling modem, the number has to be physically dialled, with the user activating the modem as soon as there is a high pitched shriek on the end of the line.

"Registering often allows you access to parts of the board off limits to the non-registered."

If all goes well the modem will respond with a CONNECT message, which the terminal software uses to tell you whether or not you have successfully connected. On the other hand, the modem might respond with a NO CARRIER message which means that it was not able to connect.

Better modems will also detect VOICE and BUSY, telling you exactly why connection failed. BUSY means that the line is engaged while VOICE indicates that the number you rang is a normal telephone not connected to a modem.

If you come across one of these messages, all is not lost. Try again after a while, as popular boards often have all their lines in use.

If all else fails, try dialling manually. Often some boards are only on-line for certain hours of the day and therefore unable to answer the phone, or even worse, the SYSOP, the person who runs the board, might be using the phone to talk to some mates.

However, if you do find a computer on the other end of the line – a high pitched squeal when you pick up your receiver is a dead give away – and you still can't connect or all you're receiving is a load of garbage, it's time to make sure you're on the correct settings for the board you're trying to access, or that you can connect at all. The most common reason for not being able to connect is having a modem that is unable to operate at the speeds that the host requires. The only choice you have then is to get another modem or try a different board that uses the same settings as your modem.

Logging on

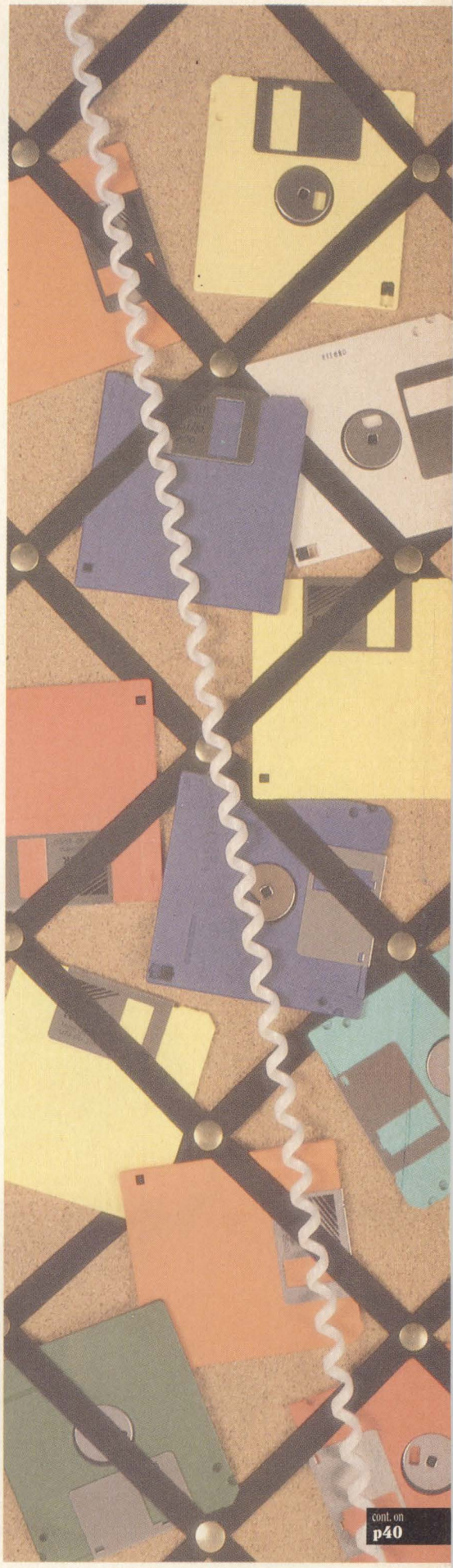
After connecting, you have to log on. The first time you do this, the board will usually ask you a lot of questions. It's worth answering them as fully and correctly. Don't be tempted to be stupid. A bulletin board is a service to you – the SYSOP doesn't have to do it, so if you do log on try to be courteous.

The formalities out of the way, you will probably be given a code. The next time you log on this code, along with your password, will let the board know exactly who's calling. It's also worth registering yourself onto the board. Registering often allows you extra time to download files, and access to parts of the board off limits to the non-registered. Normally to register you have to answer a detailed questionnaire, and then after the SYSOP has checked your entry he awards you a new user access level.

On some of the more popular boards you are virtually forced to register if you want to access anything other than the most mundane files. This usually involves sending a small subscription fee to the SYSOP. The fee is only usually about £10-15, and is very worthwhile as it allows you almost full access for a year. It keeps the board going for everyone to use – the SYSOP doesn't get paid for running it. Only the most popular boards ask for money anyway.

Find that file!

One of the first things to do once on-line to a BBS is to access a file list. A file list is a simple ASCII listing that contains information on the files available for downloading. At the very least, these will give the filename, date uploaded and file size, and on some boards, the approximate time it will take to



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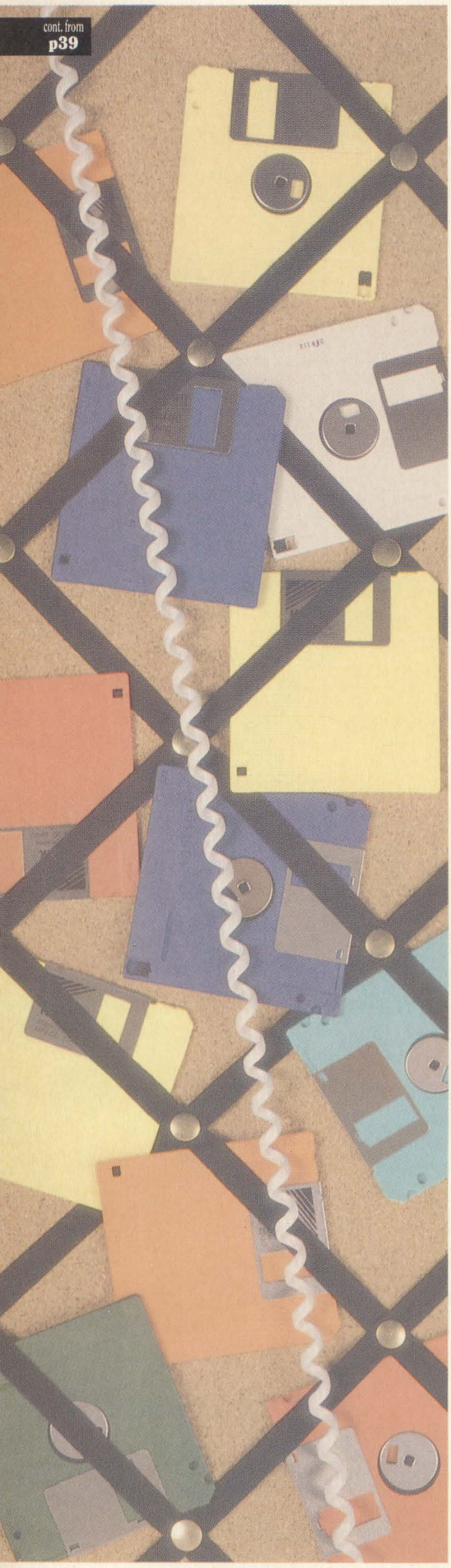
Gettin' on down to some serious downloading...

On examining the file list, the first thing you notice about the files are the funny filename extensions they all seem to have. The most common extensions you will come across will be .ARC .LZH .ZOO and .ZIP. But what do they all mean?

Well, each program actually consists of a number of files. For example, the main program file, an information file and some sample data. On the odd occasion where the program is just one big file, there will probably be some kind of library or configuration file required before the program will run. In any case, there are bound to be several files that have to be downloaded simultaneously. Hence the archiver was invented.

The different extensions all refer to different archivers. They all do the same thing – take a bunch of files and join them all together to form one big archive containing all the necessary files. As an added advantage, archivers also compress the files, resulting in shorter downloading times as there is less data to transfer.

Once you have downloaded the archive file, you have to run the archiver again to decompress all the programs in the archive. Archivers are perhaps the most useful programs you will need, after the terminal software. They are therefore stored as decompressed single files on boards so they can be easily downloaded.



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download the file at your current connection speed.

Each entry will also have a description of what the file contains and on better systems you can select the level of detail that the file description has. This allows you to see if whatever you're interested in is what you want, as the files can sometimes have similar names. A BBS or any on-line service that has file areas to download programs will always have a file list. The list can be viewed while connected to the host system, although it is better to examine the list off-line by downloading it. This reduces actual connection time, saving money on phone bills.

A matter of protocol

Having logged on and found a file that takes your fancy, you can begin the downloading process. You might find it difficult to download files at first, but luckily once you know the operations required, it becomes very easy.

When you download for the first time, the main stumbling block will probably be protocols, primarily because there are so many of them – X, Y, WX, ZMODEM, KERMIT and CIS-B are the main ones – but even all these have variations. But what exactly is a protocol?

When you talk to somebody over the phone line, you can often hear crackles and glitches on the line. When a computer is transmitting across a phone line, the same thing happens. A computer signal is made up of various frequencies, so when there is a little crackle on the line, the computer gets a bit confused about whether or not it's supposed to be there. So some way of checking the data is needed. That's where transfer protocols step in.

When a file is being transferred it is split into blocks of about 1Kb length which are sent along with another piece of data called a checksum (there are other methods such as using a CRC, but it basically works the same way). The checksum is literally the sum of all the bytes in the block. When your computer receives the block, it calculates its own checksum and compares it with the one sent by the host. If they don't match up the computer assumes that the data has been corrupted and instructs the host computer to re-send that particular block.

"It's all too easy to get carried away and spend hours on-line, making BT happy but not your bank manager!"

So, check to see if your software supports any of the protocols listed. At the very least there should be the XMODEM protocol. The better the software, the more protocols it will support.

Once you've selected a protocol, the host prompts you to initiate your downloading sequence. All this involves is telling your computer where to put the file it's receiving, and then starting the download procedure. The rest is automatic.

When the downloading is finished you are returned to the board's file system. Each protocol works in a different way, but their basic mechanism is the same and they make downloading a far less painful and infuriating process.

Be organised or be broke

Using these services is simple. Everything can be selected from menus – in fact, this is the easiest way. If you do know exactly which section you want to go to, you can usually enter a command or key sequence to go straight to it.

It's a good idea to know exactly what you want to do once you've logged on to a board. Making a mental plan is the best way to ensure that you don't start doing something you didn't intend to. It's all too easy to get distracted – seeing a message on the board and following it up. The best way to approach something like that is to set aside specific 'messing about' sessions, to explore areas on the board. The alternative to good planning is a massive phone bill.

There's more to comms than a load of PD...

It's all very well getting software from a board but there is a lot more to comms than that. The on-line world has so much to offer everyone:

- ELECTRONIC MAIL On-line services can be used to send 'electronic' mail, a quick and reliable way of getting your message across. This doesn't mean that mail is restricted to the board to which it is sent, however, as many boards are networked. In the middle of the night, they call each other up and exchange information, so can send mail to anybody around the world that has a mail ID.

- MULTI-USER GAMES (MUGs) Real-time multi-user on-line games usually take the form of adventure games. The real attraction of these are that your opponent is not a computer but other people, possibly from all over the world. There is no foregone conclusion to the game, as it develops as the players make their moves. One such game, *Shades*, which is accessible from Prestel, has been going for years. There is no foreseeable end, as new players are joining all the time.

- DATABASES These contain information on almost everything – like an on-line encyclopaedia, but regularly updated. They do cost money, however. At the very least there will be a subscription fee. Then on some data systems you are charged for the amount of information you access. Mailing facilities are usually free.

- ON-LINE NEWSPAPERS For those that like to keep up with current affairs, world markets etc. the on-line newspaper is the single fastest form of the written word in the world. Subscription services such as PRESTEL provide a wealth of information, anything from the weather forecasts to racing results.

Comms is a very involving and exciting area of computing. The simple fact that you can talk to another computer, anywhere in the world is a daunting concept at first. But it's all too easy to get carried away, spending hours on-line, making BT happy but not your bank manager.

Electronic Mail

On most boards, you can leave messages for anyone who logs on to that board. If you have a query, there is a strong possibility that somebody will be able to help. This is particularly true of subscription services, like CIX and CompuServe. Both these services require regular subscription fees, and while on-line you are charged according to which facilities you access. The best aspect of all these subscription services is that the programmers themselves often leave the latest versions of their software on-line for all to download. Even better is the fact that it is possible to send the programmers mail about their software – bug reports, enhancements, possible improvements, etc – and get a prompt answer.

This is possible even if they live abroad as CompuServe, perhaps the best place to catch programmers from around the world, has local dial up access numbers. This means you won't end up with an astronomical telephone bill just to tell some outer Mongolian programmer that his super-strobing, animated font creation utility crashes your computer whenever you use it. In fact, if you prepare the questions you have beforehand and transfer them as a text file, the process can be very quick indeed.

No need to be abusive

It's important for the benefit of all comms enthusiasts that these services are not misused. The upload/download process especially is susceptible to abuse. Malicious uploading of viruses does not make the SYSOP's job any easier. They can't always check every file to see if it's infected so unfortunately there is a possibility of unwittingly downloading a file containing some type of virus.

It's imperative to check the files after de-archiving. Thankfully it 's very rare to find a virus – I've only ever caught a couple in over two years of BBSing. The best way to check for viruses is with, believe it or not, a virus checker. Most boards will have a file area dedicated to these invaluable little programs, and it is well worth the minimal amount of time and effort it takes to download one of them.

Courtesy while on-line is imperative. With most boards, when you log off you're asked to leave any comments or if there is anything else you would like to see on the board. If you don't like a system by all means tell the SYSOP, but don't just leave nasty messages slagging the board off – be constructive in your criticism.

Be good to the board and it will be good to you, and this is a philosophy you can carry over into the comms world in general. Have fun exploring the remote access world.

Jargon Busting

ARCHIVER – A program that takes a group of files and compacts them to produce a single, compressed file. This reduces the size and the time taken to transfer a program.

AUTO-DIALLING – A feature of a MODEM that will dial a number when instructed to do so by the computer.

BBS – Bulletin Board System. An electronic service that allows you to 'pin-up' information for others to read. BBSs also contain PD and shareware files for DOWNLOADING.

CHECKSUM – A form of error checking that involves adding up all the bytes in a block. The sum is sent and compared with the sum calculated by the receiving computer. If there is a difference, all the bytes have not been received properly and the block is re-sent.

CIX – Compulink Information eXchange. A subscription service acting as a forum for debates and queries. Very popular with many important people in the computing industry.

COMMS – Communications. The process by which one computer is connected to another for exchanging information.

COMPUSERVE – A subscription service like CIX, but more like a BBS, with a massive file section for all types of computer.

CRC – Cyclic Redundancy Check. A form of error checking which is more efficient than the CHECKSUM method.

DEMODULATION – The reverse process of MODULATION.

DOWNLOADING – The process of receiving files from a BBS.

FILE AREA – Files available on remote services, such as BBSs, are categorised into sections called file areas.

HOST – The host is the computer with which you are communicating. It can be a remote service or another computer directly connected to your own via a serial cable.

LOG-ON – The process of 'signing on' to a BBS.

MODEM – The piece of hardware that carries out the MODULATION/DEMODULATION process.

MODULATION – Conversion of signals from the computer's RS-232 port into a form suitable for transmission over a telephone line.

MUG – Multi-User Game. An on-line game, usually of the adventure variety, where your opponents are real people, not characters being played by a computer.

ON-LINE SERVICE – These is the general term for a remote service that is accessible from a telephone line.

PARITY – START – STOP BITS – These three bits pad the standard character to form a pattern that the computer recognises according to the settings it's on.

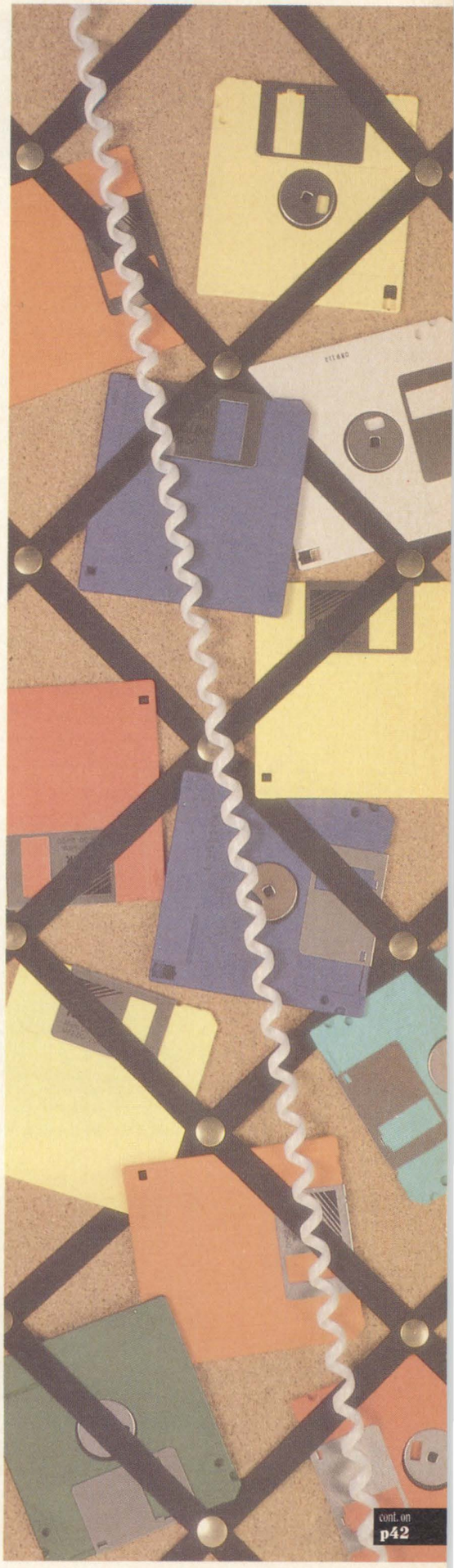
PROTOCOL – When DOWNLOADING a file, the file is split into blocks by the transfer protocol. This means that if there is an error, only the last block sent has to be re-transmitted, speeding up the process.

RS-232 – Serial/MODEM port. This is the standard port used for communication with other computers or hardware such as MODEMS and printers.

SYSOP – System Operator. The 'manager' of the BBS, who controls it and allows users access to the board.

TERMINAL – Terminal Software. This is the software that translates your actions into signals to transmit over the communications link, and vice versa.

UPLOADING – This is the reverse of DOWNLOADING, where files are sent to the BBS for other people to download.



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Five terminal cases of public domain software

So now you're eager to start tapping those bulletin boards for veins of PD gold? Well, hold on one minute before you rush out and buy a terminal software because there's plenty of the stuff already out there in the public domain, though you'll have to use a mail order public domain library to get it in the first place, of course!

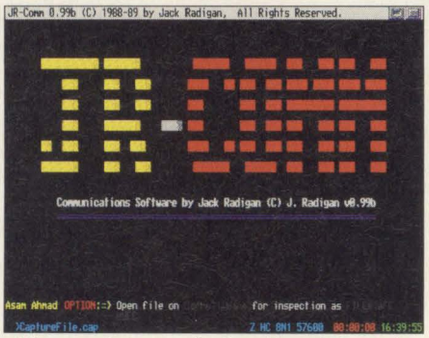
To help you choose the package that suits you, here's a rundown of some of the most popular terminal software available in the public domain...

JRComm

AMIGA *JRComm* is a fully featured communications package, written by Jack Radigan. The latest release is version 1.01, which is available by registration only. Previous releases, up to version 0.99 are shareware – try before you buy.

JRComm has many terminal emulations, such as VT100, IBM Colour and Mono modes, Amiga ANSI and SkyPix being the main ones. It supports nearly all possible communications configurations and has an extensive set of transfer protocols, including CIS-B (for CompuServe), WX, X, Y and a full implementation of the Zmodem protocol.

The program is easy to use, making full use of Intuition, the window environment on the Amiga, and is fully configurable to the extent where you can even select a non-standard serial device to use as the communications port.



***JRComm*: packed to overflowing with emulations and protocols, it can also reproduce impressive graphics.**

JRComm also supports full 16 colour ANSI graphics, the type usually found on IBM-PC's, to reproduce the impressive graphical displays that bulletin boards are using more and more often. A word of warning, though. This can sometimes reduce the efficiency of the system – the more colours used the longer it takes for the computer to display the data. This is especially the case if there are a lot of ANSI scan codes and screen graphics.

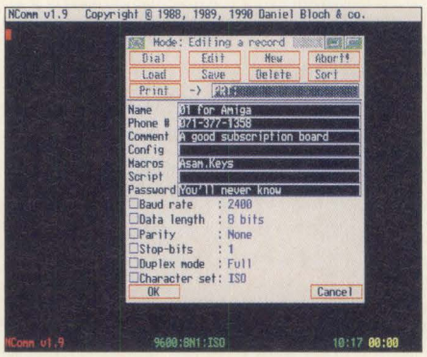
With an excellent phone directory, macro (keyboard shortcuts) facility and other nice little touches, *JRComm* is a very good package that would serve the comms enthusiast well.

AMIGA 85%

NComm

AMIGA This package is stripped to the bare basics in terms of features. All the main transfer protocols – X, Y, Zmodem etc – are supported. There is an easy to use fully configurable phone directory to store all your bulletin board numbers and the settings they require. All the main functions have hot-keys assigned to them so that controlling the program can be done via the keyboard alone.

The program is fast and has a few nice features such as the facility to enable you to view the file currently being downloaded from the host system. This is especially useful when downloading a text file through a protocol other than the standard ASCII form.



***NComm*: a bit lacking in terms of featues, but nevertheless a sound package for the beginner.**

NComm has full support for all Hayes compatible modems and has the option of storing several macros (keyboard shortcuts) on the function keys to control the modem, or storing useful information such as your name and password for the current service to which you are connected.

A very good program for the beginner in comms and a useful addition to any collection.

AMIGA 78%

ProComm Plus

PC *ProComm Plus* has been available for quite a while now, and has had many upgrades along the line to keep it up to date with new developments in protocols and communication standards.

***ProComm Plus*: a bit of a classic but one which is continually being updated to keep it a relevant package.**

It has an impressive range of features including a wide variety of protocols, with many special PC-specific ones such as SeaLink and Telink, as well as the standard ones. Perhaps one of the best features is the powerful *ProComm* script language that allows almost total control of the program from a text file with all the commands in it.

Another good feature of *ProComm Plus* is the built-in host mode. This can be extremely useful, especially when you work with PCs at home and the office; you can leave *ProComm Plus* running at home and receive files by dialling up from work.

The host mode acts as a bulletin board in many respects, though not quite as easy to use, and is excellent for remotely controlled file exchanging.

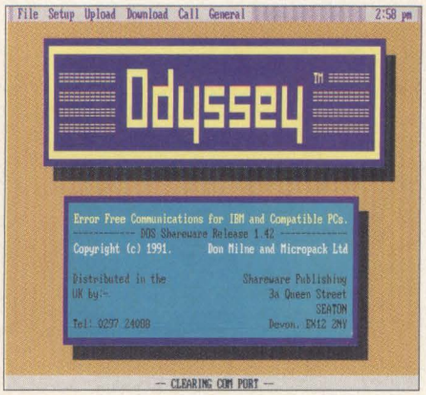
PC 80%

Odyssey

PC *Odyssey* is a new package that claims to carry on where *ProComm Plus* left off. It is comprehensively kitted out, and ready to handle even the trickiest of situations. It has a multitude of terminal emulations for BBSs and special VT series systems, and – rare nowadays – the Prestel 1200/75 split receive/send speed mode.

Odyssey also has a Pascal-like easy to use yet powerful script language, with a useful learn mode that records your actions so that you can easily create scripts without having to learn the script language.

Odyssey's best features are its full host mode facility and the MNP 5 error



Odyssey: new on to the scene, but already proving to be one a hit with a impressive range of features.

correction/compression facility that allows data through at a speed approximately four times the raw data rate of your modem. MNP is usually only found in modems, so this is an excellent way to get MNP without having to buy an expensive modem.

There is also a built-in text editor, an excellent phone directory and best of all an extensive help feature that guides you through nearly all the functions. All in all, an excellent package that no serious comms enthusiast should be without.

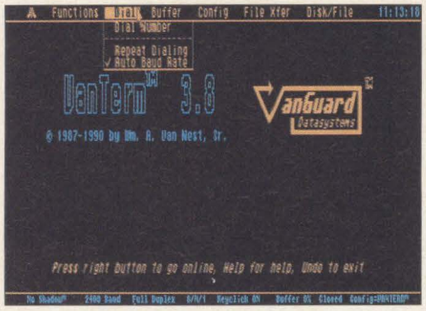
● *Available only from Shareware Marketing.*

PC 91%

VanTerm

ST There are not many terminal programs on the ST, but *VanTerm* is one of the good ones. The main feature that distinguishes *VanTerm* from other packages, is that the program can be easily upgraded and added to when new modules are made available.

This is especially true of the file transfer protocol section. New protocols can be easily added, as the actual transfer processes are controlled by external executable programs (not part of *VanTerm*) that do all the work. This is advantageous because new protocols can be added as and when they are devised, keeping the program up to date.



***Vanterm*: Easily upgraded to take advantage of new protocols making it the choice package for the ST.**

VanTerm can emulate most terminal configurations such as ANSI BBS and the VT series. It also has a good macro (keyboard shortcut) facility to speed up logging-on. The phone directory is good, and has the facility to reconfigure the whole terminal to suit the service that is being called.

For ST users *VanTerm* is a pretty difficult package to beat.

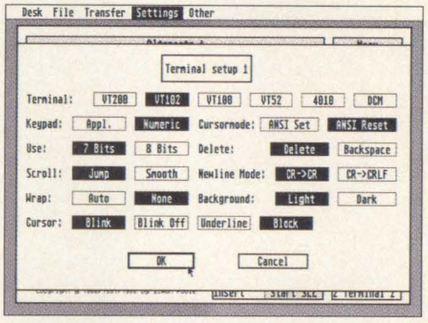
ST 78%

UniTerm

ST *UniTerm* has been around for quite a bit. It's relatively easy to use; press help for an option screen, and all the functions are shown with their key assignments. It's not a help facility, though, as it tells you nothing about the functions.

One good feature is the screen cut facility that allows you to select an area of the screen using the mouse, then send it back down the line to the remote terminal, or save it to disk. This can be extremely useful, especially when in on-line conversations, because it allows you to repeat sentences.

UniTerm doesn't have many built-in protocols, just the bare minimum. Instead it has the facility to execute a program from within the terminal, allowing you to access



***Uniterm*: A basic package, but it does its job satisfactorily enough. Ideal for beginners.**

external file downloaders.

UniTerm is a basic terminal program with few features. The functions it does have are very basic but do the job satisfactorily. Good for beginners.

ST 63%

The features that make all the difference

Here are some of the most useful extra features that would come in very handy:

● **TERMINAL EMULATIONS** – Comms has evolved in such a way that any computer can talk to any other computer, even if they have a totally different architecture. Emulations are the things that take care of this by interpreting the data sent from one computer into a form that the receiving computer can understand.

The main emulation to look for is ANSI-BBS, for bulletin boards, although it doesn't matter if there is no option for it, as you will still be able to read all the text, there just won't be any screen graphics/colours. Other popular emulations include VT-series and TeleType.

● **PROTOCOLS** – Protocols make file transfer an easy process. At the very least, a comms package should have Xmodem and standard ASCII, although the latter doesn't have any error checking. The more protocols available, the better, as this will mean that you will be able to download files using the most efficient protocol for a particular job, making the process faster.

Current favourites are Zmodem, and SuperKermit. Both have a wide range of excellent features that make downloading a simple and error-free process. SuperKermit is rare, though Zmodem is almost the new standard in protocols. Other notable protocols are the Ymodem range and Ymodem-G in particular, which is designed to be used with error-correcting modems or via direct link, as Ymodem-G doesn't do any error checking for itself, and provides extremely fast data transfer.

● **PHONE BOOK** – The idea behind a phone book is to store all your favourite boards' numbers and the configurations they need. This means that when you select the board you want to call, the speed, colours and word type (parity etc.) are all set up. Better phone books will also allow for extra information such as passwords and allow for a macro setup.

● **MACROS** – Macros are basically keyboard short-cuts. If you use the same sequence of characters frequently can be 'programmed' into a function key so that when you need to type it, you can press the corresponding function key, to save time.

● **SCRIPTS** – Scripts are very useful for automating a regular process. If you know exactly what you want when you log-on to a board, a script can save time and money. For example, if you logged on once a week to a board to read mail, you could set up a script that imitates pressing the keys that you would need, by sending them directly to the serial port. Better script languages will also wait for particular prompts, responding accordingly, and have extensive other facilities. It is just like a programming language, devoted to controlling your comms port.

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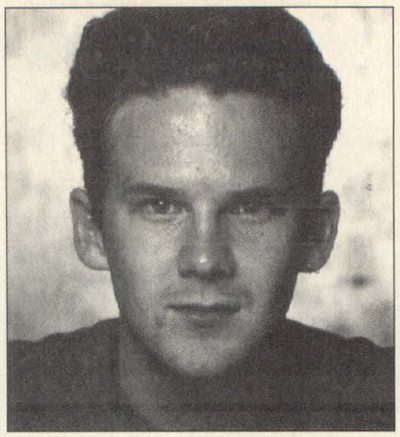

Grip your joystick and prepare to do battle with hordes of aliens from Alpha Centauri as Adam Waring gives you the essential low down on the PD games scene...

Everybody likes playing games, even the most 'serious' users (though they'd probably deny it). Whether it's a quick five-minute blast on a shoot-'em-up, or a couple of hours locking horns over a really good strategy game, there's something for everyone.

And there are plenty of games to be found in the public domain. You'll find the old classics with bags of playability, such as *Space Invaders*, to some modern gems that put many a full-priced game to shame.

Then there are many public domain games that you simply wouldn't find an equivalent of in full-priced software, simply because they are not judged to be commercial enough.

And though a PD game may not offer the slick graphics or overall polish that full-priced games do (and this is not always the case!), you'll find that some of the most playable, long-lasting, and addictive games are free!

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Seven Tiles

Amiga • G199 • NBS
132 Gunville Road, Newport, Isle Of Wight, PO30 5LH.
☎ 0983 529594

It's a funny old game, 21st century football. For a start, each side has about 100 men, there's no offside or corners or throw-ins – in fact, there seem to be very few rules of any sort. Just about all it has in common with the nation's favourite game is that the side that scores the most goals wins.

Seven Tiles is a cyberpunk-style footie sim. Two teams battle it out on a suitably futuristic metallic pitch. When the whistle blows it's a mad scramble for the ball that lies in the centre of the field – there's none of this namby-pamby taking turns to kick off. And such conventions as your team mates starting off on their own side of the pitch? Old hat! In *Seven Tiles* they start from wherever they please; goal-hanging is part and parcel of tomorrow's soccer match.

Don't worry about booting the ball out of play – there *is* no out of play. The game takes place in an enclosed arena, and is surrounded by walls that the ball simply bounces off of when struck. Players are prevented from getting too close to the walls by an electric fence. Ouch!

Pick-ups appear frequently on the pitch, and running into them often gives you an advantage over the other side for a few seconds. The exact effect depends on the colour, and varies from speeding your team up to completely freezing your opponents.

You control whichever player is nearest the ball. You can run in the eight directions that the joystick gives you. Running into a member of the opposing team that has the ball gains you possession. You're only able to keep hold of the ball for a few seconds, though, as you automatically give it a good kicking after that time. The longer you hold fire before releasing the button, the further you kick the ball.

The screen scrolls quite rapidly at times, in an effort to keep up with the ball. The players are seen from above, and are quite tiny. The team colours are red and green, so there's no danger of getting mixed up between the two.

You can choose to play either the computer or a human opponent. The computer plays a tough, but none too intelligent, game. It messes around in the goal area, hesitating and back-passing before going for goal. Quite a good thing really, as you wouldn't stand a chance otherwise.

As ever, the best fun can be had when playing a real person. The competition gets really intense when you're a goal down and there's just a minute 'til full time is reached.

Being based on futuristic football, comparisons with the full-price game *Speedball* are inevitable. While *Seven Tiles* lacks the graphical sophistication and polish of Imageworks' release, the playability is spot on. Who knows, in fifty years' time football could still be the nation's favourite game.

AMIGA **90%**

7 Tiles isn't the tedious Indian game played with sticks and mud it sounds, but a representaion of cyber-football in the 21st Century. Over 'ere son, on me 'ead!

Cubulus

Amiga • G175 • NBS
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Rubik's Cube was the craze of the early 80s. Frantic fingers worked the plastic puzzle in classrooms and offices all over the country, and kids clever enough to solve the thing made a small fortune through selling

photocopied pamphlets to their mates.

Cubulus is reminiscent of Dr Rubik's invention, but rather than a cube, it has been laid out on a flat surface. There are a number of coloured 'faces', each subdivided into a further 16 squares. The computer jumbles them up for you, and you have to work out how to get the puzzle back to its original state. Hmmm, could be tricky...

Difficulty is set in two ways. First, by selecting the number of moves you have in which to solve the level. Get to more than half a dozen moves deep, and things start to look a bit sticky. It's further complicated by changing the number of coloured faces. Four is the easiest, 25 the hardest.

The game is well presented, and though coloured squares offer little scope for completely astounding graphics, they manage to be. A pleasant enough soundtrack accompanies the puzzling.

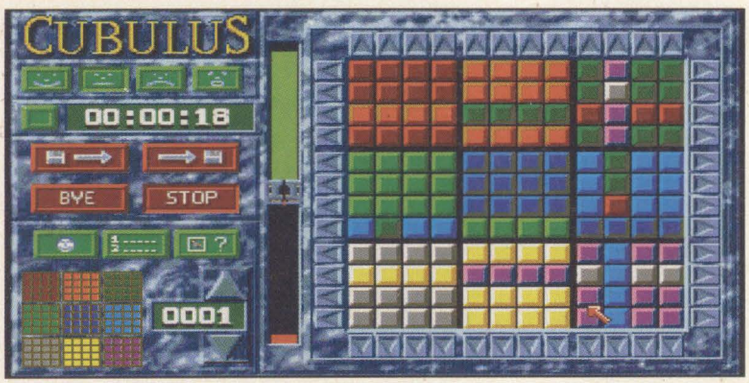
It's entirely mouse driven, and can be played by one or two players. In the case of the latter, you simply take it in turns to play the same puzzle. A time limit ticks down to keep you on your toes, and the quicker you complete a puzzle, the higher your entry on the high score table.

The only problem with the game is that it's ridiculously easy up to a point, and then becomes ridiculously difficult. Unless you make the right moves initially, it becomes far worse than when you started out. Time and time again you'll find you've ended up with it almost, but not quite, solved.

No doubt there's a set of logic rules that could be applied that would solve the puzzle every time, but you'd have to have the patience to work it all out in the first place. And if you've done that, then there's not much point in playing any more – just like the Rubik's Cube. Having said that, how long did people play with their plastic pals after they'd cracked them? Ages – that's how long.

Cubulus is a very nice looker, and is initially quite good fun. Interest may wane after a while, though – it really depends on whether *you've* got what it takes.

AMIGA 88%



What do you get if you take a Rubik's Cube, pull off all the faces, and lay them flat? Satisfaction? No! You get *Cubulus*, a computerised interpretation of the plastic puzzler.

Robotz

ST • STPD361 • Jennix PD
123 Main Street, Selby,
Yorkshire SY23 5HX.

Robotz, eh? Given half a chance they'd take over the Universe, or Planet Earth, or anything really that's worth taking over. In this instance, they reckon that your space ship's up for grabs, and so it's time to break out the plasma rifles, and to thwart those evil space fiends' plans.

Unfortunately your crew consists of just you, so you'll have to take on entire battalions of the metal monsters single-handed. But what's this? Calamity! Shooting the robots merely has the effect of stunning them for a few seconds. Urk!

Before you can destroy the demented daleks, you need to disable all the generators that supply them with the power they need to survive, then a shot or two will send them to that big assembly plant in the sky. The generators are pretty well built, though, and need to be hit ten times before they break.

And if that wasn't bad enough, the walls of the complex (the ship's layout is particularly complex – it would be!) are electrified. Touch anything apart from the floor and you're fried.

The graphics in *Robotz* are beautifully drawn. They're small, but very well detailed, and move smoothly. The backdrops are a bit 'samey' though, and for the first few levels at least consist of identical bas-relief structures. The sound is of a good standard too, and though there's no in-game music, the spot fx do their job.

The robots are particularly stupid; they move directly towards you and can easily get stuck behind things. Although a room's layout is the same each time you replay, the robots and generators start in random places, and so it's left to chance how hard each level is.

The robots take it in turns to move, only travelling a short distance and then waiting a few seconds before they do so again. This makes it reasonably easy to get to the generators and destroy them. The trick is to stand next to a generator and keep fire pressed down. You'll have destroyed it before the robots have a chance to react.

Robotz is nice enough to look at, but don't expect mega-frantic gameplay. It's not an action game, and not a puzzle game either. Slow, carefully-planned movements are required to advance through the levels. It's frustrating when you get killed because you went a little too fast and got yourself frazzled. Not recommended for the impatient, but everyone else will have fun.

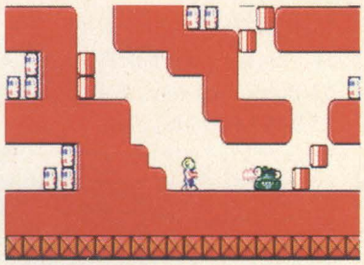
ST 84%

Get away from me, you twisted space fiends! The *Robotz* advance relentlessly, and the only way to clear each level is to first destroy the generator that feeds them power.

Commander Keen

PC • Disk 737 • Classic Shareware
23 Fieldhead Close,
Pontefract WF8 2ED.
☎ 0977 794876

Commander Keen's in trouble! The eight year old space explorer has constructed a spaceship out of household junk while his parents were out (as you do). On a quick trip to Mars, a load of aliens have nicked vital bits and pieces that power the young hero's ship. His only hope of getting back before his parents get home is to recover the missing parts...



Take that! The youthful *Captain Keen* blasts an alien with his space blaster.

Easier said than done. The aliens have taken them away and hidden them in distant places on the red planet's surface. They're well guarded too, so you'll have to use all your cunning to get them back.

At first, you roam about on the planet's surface. You're in no danger while you're up here, and this section merely serves as a means to getting between the arcadey bits. The game doesn't start proper until you enter one of the Martian buildings. In fact, you're forced into doing this pretty soon, as one obstinately blocks your

cont. on p48

cont. from p47

passage through to the rest of the game. Let the action commence!

The action flips to a side-on view. It's a fairly straightforward platform affair, with our hero avoiding baddies and leaping between ledges. Careful keyboard coordination is necessary to negotiate these perilous platforms; missing target often means coming to a sticky end. Spikes and pits of fire are often positioned in places that prove to be attractive to eight year olds.

The early monsters are, if anything, less hazardous than the background-based dangers and can be leapt over relatively easily; bumping into them doesn't do too much harm either. You simply get shoved back a bit (and you don't even get a grazed knee).

Later on, though, the beasties get, well, beastly. They'll gobble our little chum up in a single mouthful and burp rudely afterwards. And some spit laser fire at him. Luckily a laser pistol can be found to give this particular brand of baddies a taste of their own medicine.

There's plenty of other things for the taking, too. Most just give you points – accumulate enough for an additional life – but some give Keen extra powers, if you can find them...

Inevitably, you will get killed from time to time. This can only happen inside one of the buildings (as you can only come to harm once you've entered them), and when this happens you're whisked back to the entrance to try that section again with any remaining lives you might have.

The graphics are a tad basic, but everything's clear and recognisable. It's bright and brash, so your retinas may suffer after a while. Pretty horrendous spot fx accompany the game but what else can you expect from a PC game?

Playability is pretty good. Keen can leap pretty high for a kid of his age, and so talented that he can change direction in mid-flight. When he lands on a platform inertia ensures that he hops on for a couple of steps. All this adds to the feel of the game.

Commander Keen is a bit old-fashioned gameplay-wise. Platform addicts will find it fun, and the tricky layout means that it will be some time before you're making the homeward journey. (Don't think we're going to make it back before bed-time, after all.)

PC 78%

A tantalising trio of tricky Tetris teasers

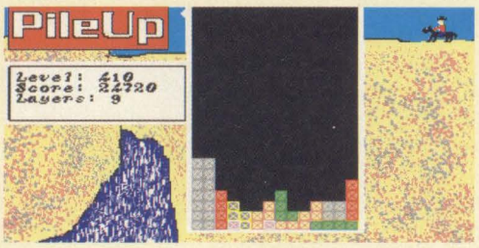
The public domain has seen many versions of the famous Russian puzzle game *Tetris*. So much so, it hardly needs an explanation, but here's one anyway:

Geometric shapes fall from the top of the screen. It's your job to move the shapes into position so that they form horizontal lines along the bottom of the screen. You can move them left and right, and rotate them in order to get them to fit. When you complete a row, it disappears, scoring points and giving you more room to play with.

Three such clones thudded onto the *Public Domain* doormat the other day. Well, we all know what they do, but how well do they do it?

Pile Up

ST • Game 74 • Solent Software
53 Rufus Gardens, Totton, Hants SO4 3TA.
☎ 0703 868882.



***Pile Up*: the prettiest of the three, with bright colours and badly-drawn backdrops. Unfortunately the least playable.**

Tetris went on for ever. You kept slapping down the blocks until eventually your luck ran out. In *Pile Up* you have an objective – to complete a certain number of lines in each level. At least this gives you a chance to wipe your brow in between bouts.

It's very colourful. Each type of block is drawn in a different colour so they clash nicely as they pile up at the bottom of the screen. The backdrops are a bit ropey though. 'Interesting' options such as bombs and acid rain don't do anything to improve the gameplay.

The control of the blocks isn't right. It's not possible to move them left and right more rapidly than they fall which is essential for *Tetris*. A bit on the 'not very playable at all' side, really.

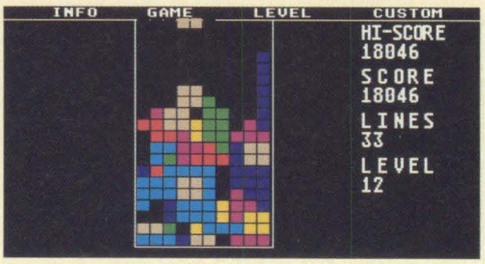
ST 44%

Fourfit

ST • Game 94 • East Midlands PDL
54 Watnall Road, Hucknall,
Nottingham NG15 7LE.
☎ 0602 630071

It's often been remarked that *Tetris* is such a simple game idea that it could be knocked up fairly quickly in BASIC. *Fourfit* has been, the programmers choosing the GFA incarnation to create the code.

It's noticeably slow, especially when the a line of blocks disappear. In fact, it's not worth playing unless it's set to its fastest level. There are a few options you can tinker around with, but it follows standard game fairly closely.



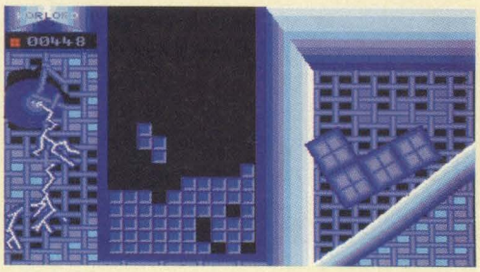
***Fourfit*: colourful and with a handful of options, playability improves in this incarnation. But it's so slooooww!**

It's quite colourful, and the control response isn't too bad, but you can't 'slide' the blocks once they've landed. It's too easy and even on the most difficult level it's not much of a challenge.

ST 58%

Wortris

ST • Michael Andersson Tjärdalsgränd 11,
18341 Täbx, Sweden



***Wortris*: *Tetris* goes Cyberpunk in this Swedish version. Of the bunch this has the closest 'feel' to the real game.**

This version is noticeably different from the other two by its distinct lack of colour. The blocks are drawn in cool blue hues, so when they've landed it's impossible to tell what the original shapes were.

While it's not impossibly fast, it's certainly the slickest of the three ST offerings reviewed. On the highest level you'll have to be a pretty accomplished *Tetris* player to keep up. You can set both speed and height – this is controlled by the amount of random rubble at the bottom of the playing area.

This one has the smoothest control – the blocks can be manipulated 'properly', and though we received our copy direct from the Swedish author, it's bound to appear in public domain libraries and bulletin boards in this country. The best of the three.

ST 78%

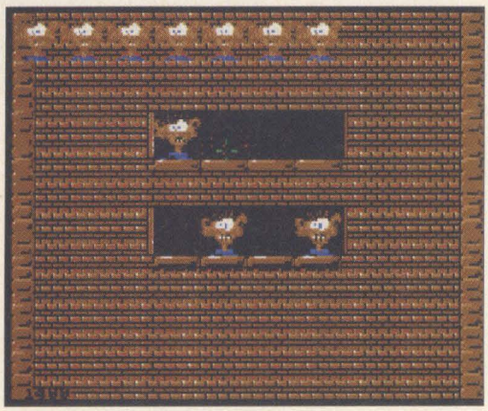
The Lamer Game

Amiga • 1179 • 17 Bit Software
PO Box 97,
Wakefield WF1 1XX.
☎ 0532 420043.

Lamers, if you didn't know, are non-techie types who dare to use computers. This despicable race must be destroyed, and you're the one with the itchy trigger finger.

The lamers pop their heads out of windows. Pop 'em full of lead as they do and they explode into a gory mess. Miss, and you'll be a step closer to game over.

Lamers is quite astounding! Astounding that anyone could be bothered to write such a hopeless game. What's even more astounding is that some people may waste a couple of quid buying it.



The *Lamer Game* certainly lives up to its name. It's a pretty lame excuse for a game!

AMIGA 25%

Zeus

Amiga •1058 • 17 Bit Software
PO Box 97,
Wakefield WF1 1XX.
☎ 0532 420043.

Zeus is a puzzle game. There's no plot to complicate things, just a simple set of rules. Should two or more identical blocks be next to each other, they disappear. The object is to make all the blocks on the screen vanish, at which point you go onto the next level.

You may only move the blocks left or right – gravity takes care of the downwards business. The rooms that these blocks are found in are, as you might expect, laid out to be as difficult as possible. Drat!

Movement is by the mouse, rather than joystick. You can't help feeling this is a mistake – the slightest movement sends your cursor whizzing over to the other side of the screen. Not what you need for pixel (or even block) perfect positioning.

The graphics are pretty poor – then again, there's not *that* much that can be done with a set of blocks. (They could have definitely looked better than this, though – the Amiga does have more than a few shades of yellow in its palette!)

It'll hold your attention for a while, as some of the puzzles are quite tricky. None of the early ones will stump you for too long, though, and you'll find yourself whizzing through them at a fair old rate. Should you get stuck – you've got one block left and nothing to match it up with – then you can simply press ESC to start again. There are no lives to run out of, or anything

cont. on p50

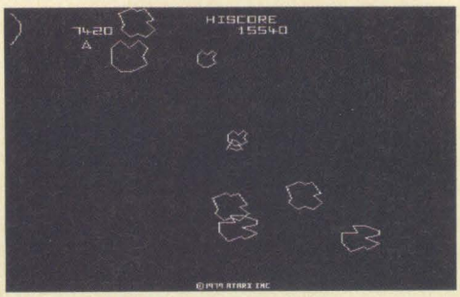
Get your rocks off: Asteroids old and new

Back in the very earliest days of arcade machines, in the same era of *Space Invaders* and *Breakout*, there was one game that stood out above all others. It had revolutionary gameplay, was the first to use vector graphics and students got so good at it that they could play for 24 hours with a single 10p (of course, they failed their exams too – that's what you get for wasting time on arcade machines instead of swotting up).

That game is *Asteroids*, a true classic and one which is every bit as playable now as it was 12 years ago. Not surprisingly the PD coders have been working on versions for you to play in the comfort of your own bedroom...

Cabaret Asteroids

Amiga • G099 • Software Expressions, Hebron House, Soin, Bedminster, Bristol
☎ 0272 637634.



In space no-one can hear you scream. Apart from when you're playing *Asteroids*, that is.

Simple line-drawn monochrome graphics, that's the essence of *Asteroids*. Your triangle-shaped ship sits in the centre of the screen; the large asteroids appear at the edges of the screen. Blast the boulders to smithereens. Each time you hit, they split into two smaller rocks. Be careful, though, or you may soon have hundreds of the little buggers all over the screen.

If you want authenticity, then this is hard to beat. *Cabaret Asteroids* is indistinguishable from the coin-op. Everything's there, down to the annoying little spaceships with a deadly aim when you hang around for too long. The only thing that appears to have changed is the coder's name, the programming team Vertical taking the place of Atari Inc. The copyright date is retained, though – we're back in 1979!

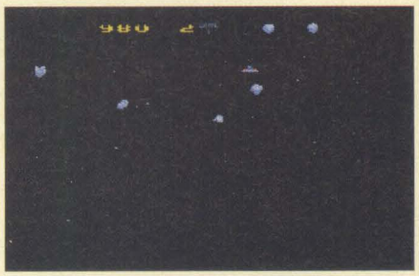
This is *the Asteroids* officianado's version. It looks, plays like the original and retains the charm and character. There's nothing new added to this version, but who needs it?

AMIGA 90%

Amigoids

Amiga • G1319 • Software Expressions, Hebron House, Soin, Bedminster, Bristol
☎ 0272 637634.

If, on the other hand, you want something a bit more up to date, then *Amigoids* is possibly the one to go for. This is still based on the same rock pulverising theme, but has plenty of new features to bring it up to date.



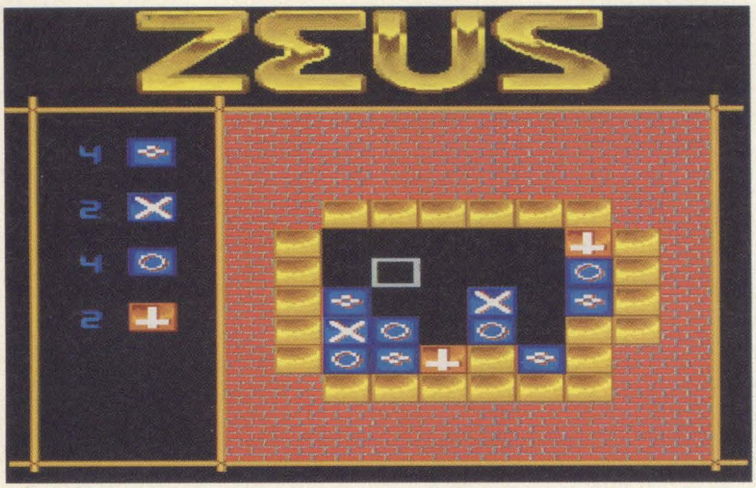
***Amigoids* is an altogether more up-to-date affair. But do you *need* these fancy features?**

Graphically is where you'll see the first major difference. Instead of black-and-white outlines, the rocks are shaded and full of detail. Gameplay is for the most part the same, though. The noticeable difference is the lack of hyperspace – sometimes essential to use on the arcade machine, but usually placing you in just as dangerous a situation as the one you'd just left. In it's place you have a choice of shield, that protects you from collisions, or 'flip' which lets you change direction instantly, preventing you getting rammed up the bottom by rocks sneaking up from behind!

You can tailor this game pretty much how you like! Fed up with shooting slabs of stone? Select something new to blast, then! Every bit as playable as the original, but with a whole host of additions and upgrades. It depends, really, on whether you're a stickler for originality, or fancy a few knobs and whistles.

AMIGA 90%

cont. from p49

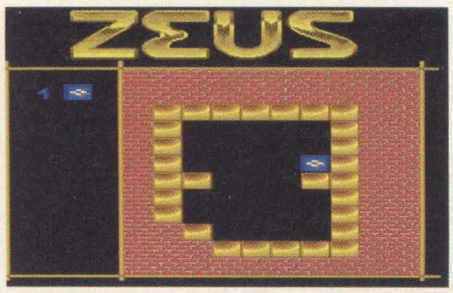


Move that one to there, then shift that across and match those two up. No, no, first get rid of the crosses, the that'll free the... No that won't work. I'll make a cup of tea and then think about it!

like that, so you could theoretically carry on 'til you've solved the lot.

A password is given at the start of each new level, so should you decide to go to bed, watch telly, go to the pub for a 'quick half', or whatever, you can switch your computer off content in the knowledge that you won't have to solve those puzzles you've already mastered all over again.

Zeus scores no points originality wise – it's heavily plagiarised from the arcade game *Puzznic*. It has kept the flavour of the 'official' version quite well, maybe too well for software house Ocean's liking. The naff graphics and dodgy control are its minus points. It's not a complete load of old blocks, though!



Oh dear, just when we'd alsmost cracked it, there's one of the little blighters left over.

AMIGA 73%

The greatest PD games ever?

Llamatron 2112

ST • Llamasoft, 489 Mount Pleasant, Tadley, Hants

"Here they come, and there's plenty of them! Oh my God! We're all going to die!" was the last thing that Lenny the llama ever said.

You may have thought that llamas have a relatively peaceful existence, standing on top of Peruvian mountains, chewing grass all day long. Let me tell you that this isn't the case. In reality they spend their time running away from terrifying telephones, mutated Mandelbrot sets and other ghastly things. Luckily llamas have an in-built defence mechanism – their ability to spit plutonium death.

Llamatron is a weird and wacky shoot-'em-up that plays at a blistering pace. Each level is fairly simple in concept – a blank screen stuffed full with nasty things that would very much like to kill you. The trick is to kill them before they get the chance!

There are 100 levels in total (though it's unlikely that you'll see them all). The time taken on each level is minimal, about a minute or two at most, but the action is insane! You barely have chance to wipe the sweat from your joystick before it's on with the next onslaught.

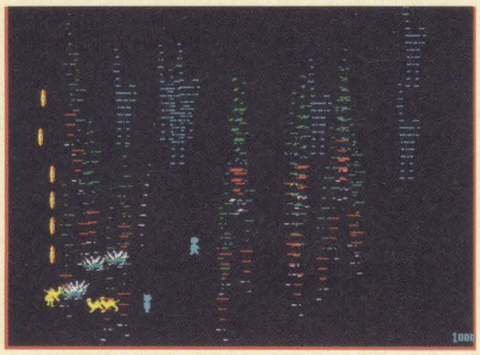
The first couple of screens shouldn't present too many problems. Keep moving and killing and it'll be over before you know it. But as you get further into the game you meet more and more on-screen enemies.

Not everything's nasty, just most things. Friendly creatures will follow you about once you've made contact with them and protect you from the enemy. Pick-ups provide you with three-way shooting, bouncing bullets and all manner of other goodies.

Firing is automatic, in the direction the beast happens to be pointing at the time. Hold down the fire button and the shooting direction is frozen, so you can shoot at things and run away from them at the same time (a very sensible tactic, believe me!)

Taken individually, the sprites aren't mega-impressive, but combined on screen they offer a visual extravaganza! There're so many things moving around at once, with brightly coloured pulsating screens, it has to be seen (and played) to be believed! It's not just graphically that you'll be stunned, though. Your ears are in for a treat too. The sound is so atmospheric – the samples whine and drone throughout the game. It's like nothing you've ever heard, or is that like *everything* you've ever heard, all rolled in to one? Look, why don't you just buy the thing and hear for yourself!

Llamatron is mad, manic action all the way. It's difficult, sure, but not as difficult as tearing yourself away from the keyboard once you've loaded the thing!



What's going on? Cosmic time warp? Entering the fifth dimension? No, I think we've died, actually.

ST 96%

Llamatron 2112

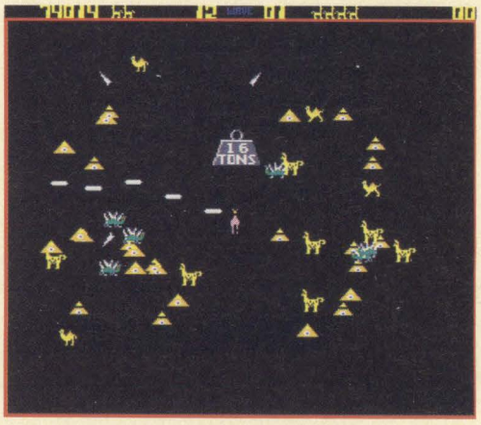
Amiga • Llamasoft, 489 Mount Pleasant, Tadley, Hants.

Amiga owners, don't be jealous of ST bods because they can play *Llamatron* and you can't, 'cos it's also available on your machine

The good news is, it's virtually identical to its Atari cousin. If anything, the sound on this version is slightly better, due to the superior sound chip in the Amiga. There are, in fact, two versions available for this machine. The standard version caters for half meg machines. There are more sound effects for those with larger memories as well.

It's the PC owners I feel sorry for. When will they be getting their version?

AMIGA 96%



Finely honed joystick skills and a fair old dash of luck are the attributes needed to make your way through *Llamatron*.

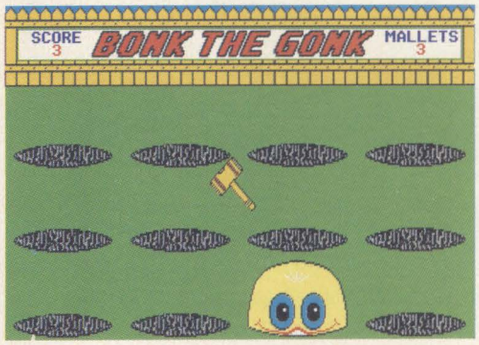
Bonk The Gonk

ST • G146 • NBS
132 Gunville Road, Newport, Isle Of Wight, PO30 5LH.
☎ 0983 529594.

Bonk the Gonk is reminiscent of those fairground games where creatures pop their heads out of the ground and you have to bop them on the head with a mallet. In fact, it rips them off shamelessly, adding a few features of its own .

The Gonk lives in the ground. He has many burrows, and regularly pops his head out to see what's going on. You have a couple of seconds to whack the living daylights out of him before he disappears again.

Don't get too itchy a hammer finger, though. The little critter some-times sticks dynamite out instead. Hit that and you lose one of your three lives.



Mr Mallet! Mr Mallet! Whack the 'little devil' on the head as he pops up for a breather. Simple game with fun effects.

Some excellent sampled sound fx accompany the pulverising. These are the words of Gonk himself, and tell you whether you've struck home successfully or not.

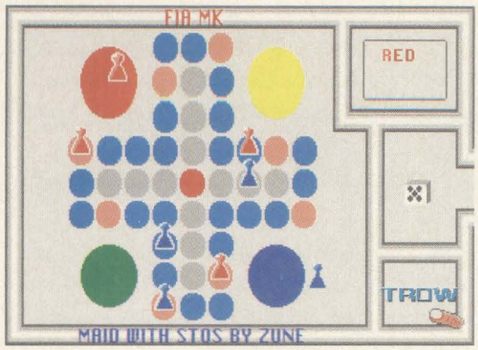
Bonk the Gonk is an extremely simple game, and hence has little longevity. There's a 'wacky' sense of humour throughout, though, and in the short term it will raise a chuckle or two.

ST **64%**

Kia

ST • GAM65 • Trust PD
18 The Park, Southowram, Halifax HX3 9QY.

Kia is a computerised version of the kids' board game, Ludo. The object is simple: take all your four 'men' from your base all the way to the centre. A dice is rolled to move your counters, and you choose which one you'd like to move.



Now this is what I call a game! The exciotement of rolling the dice! The thrill of landing on your opponent! Gosh, what fun!

You can start new men on their journey on the throw of a one or a six, and should you land on a square occupied by an opponent, they're sent back to the start. Ha!

Computerisation doesn't do the game any favours. It does save you the energy exerted in rolling a dice, but won't take part by playing one of the other colours.

It's hardly the sort of stuff to keep you engrossed for hours. Let's face it – the game even bores kids to tears. The graphics are fairly crude, too. It may be worth getting if you have particularly patient young members of your family, but otherwise forget it.

ST **30%**

Popeyed

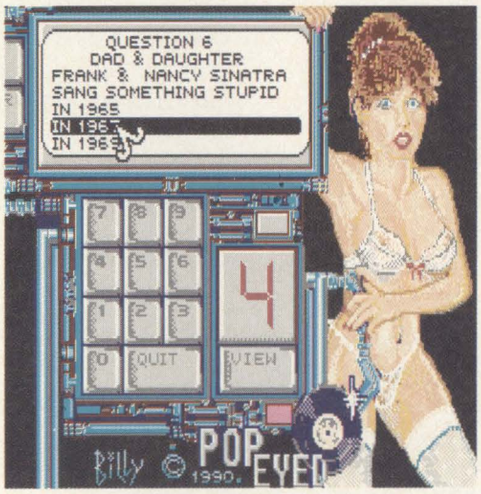
ST •Nightshift
8 Bertelin Road, Beaconside, Stafford ST16 3JJ.
☎ 0785 49332

Pop Quizzes, eh? Don't you just love 'em? Well, it depends, really, on whether you're a hip dude into the alternative indie scene, or an old fogey who remembers the old money and fought in both world wars (and the Boer war too!)

Because pop quizzes are generally on music from a bygone era *Popeyed* is strictly 60s only, so young whipper-snappers aren't likely to know too many of the answers.

But there's added incentive to get the questions right, for this is a *strip* pop quiz. For each correct answer, an item of clothing is removed by the game's hostess. In addition, a story builds up with each correct answer. This is told in a fairly humorous cartoon style, the events of which are rather predictable considering the nature of the game.

Most of the questions are simple multiple-choice affairs. There's a bit of variety with some, though, where you're asked to name sample intros taken directly from vinyl records, or make out who the digitised pictures of ancient pop stars are supposed to be.



Cor blimey! Answer the questions to watch the story unfold. Thing is, you'll see everything there is to see within the hour.

There's a certain amount of inevitability to the game. Even someone whose 60s pop knowledge isn't that good will get to see everything there is to see within half an hour or so. You only need to get eight answers right to get all the girl's kit off, and educated guess-work or simply luck will see to that.

The game has been written, rather surprisingly, with *Talespin*, normally used for creating adventure games. Still, it seems to work reasonably well. It's fairly slow, though. The disk seems to be accessed between every single thing you do. Annoying, but then again, you'll probably only be playing it the once...

ST **47%**

Douglas Rockmoor

ST • BU65 • Sphinx Software, Erw Fynydd, Carmel, Llanelli SA14 7SG

"Diamonds are a greedy bast's best friend," is how the saying *should* go. The riches that these lumps of crystalised carbon fetch is enough to tempt normally sensible folk to risk life and limb.

Especially *Douglas Rockmoor*. He's one greedy SOB, and will stop at nothing to fill his pockets with the valuable gems. Doug has to dig through muddy, rocky, creature-inhabited caverns in order to get to the gleaming jewels. And that's dangerous! Digging through mud has a tendency to dislodge boulders. And should a boulder land on his head, then he's dead. Not an unreasonable assumption, really.

Luckily, Douglas has *you* to guide him on his quest for the loot. Most of the underworld caverns in which the game is played are filled with mud. As he moves through this muck, he clears a trail behind him. Gravity affects all things, though, and anything left unsupported will tumble downwards. The game is heavily based on the old 8-bit classic, *Boulderdash*.

The whole game world is constructed from simple building blocks that follow a set of rules. Boulders and diamonds, for instance, obey the laws of gravity. The deadly creatures that inhabit the place will (rather stupidly) follow the walls. Of course, the caverns are laid out in such a way so the diamonds are rather hard to reach. A good combination of arcade skills and logical puzzle-solving are needed to crack each level.

It's because of this that the game is such good fun! Every level is a challenge which you'll play and play and play until you've solved it. You may select to play any one of ten levels, so once you've (finally) beaten level one, you don't have to replay it each time. And indeed, should you get stuck on level one, you can bypass it and try another.

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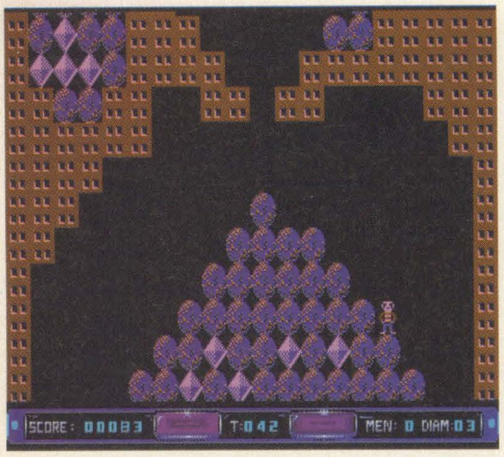
cont. from p51



Just look at all that lovely loot! Pity it's buried under ten tons of rock – something that happens quite a lot, as it happens.

The graphics are similar to the original versions of *Boulderdash* – they're crap! Only four (dreary) colours are used, and they look a bit blocky. Strangely, though, this doesn't detract from the game too much, but *adds* character, making it even more reminiscent of those old 8-bit games.

It scrolls very smoothly indeed. But this smoothness seems to be in place of speed – the character actually moves faster than the screen will scroll, and it's possible to move off the screen, where you have to wait for the scrolling to catch up with you. This is more than a tad annoying, especially when you get killed by off-screen incidents that you simply don't see happening.

That aside, the puzzles are well laid out, devious and will take a while to solve. The game has atmosphere, it's addictive and has plenty of playability. A gem!

ST **91%**

Ground Wars

PC • Advantage
56 Bath Road, Cheltenham, Glos GL53 7HJ
☎ 0242 224340

Did you ever play that game Tanks at school during lunch break? You know the one, where you had a piece of paper, drew a few rough-looking tanks, and had to flick a pencil across the paper in order to destroy a chum's enemy artillery. Should the pencil mark 'penetrate' the other player's tank then it's immobilised and out of the game.

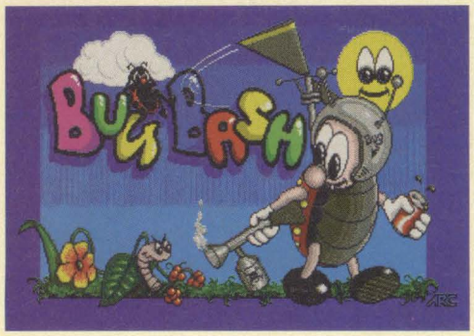
Bug Bash

Amiga • Amiganuts
169 Dale Valley Road, Hollybrook, Southampton, SO1 6QX ☎ 0703 785680

There's one thing that people often say to me: "What the hell are you doing in my garden?"

"Bug Bashing," is what I invariably reply.

I can't stand litter, see. There's nothing that makes me quite so sick as an English country garden littered with empty drink cans, bottle tops and food wrappers. So I make it my task to tidy. It isn't an easy job, though. The gardens are infested



Now there's a pretty title screen. *Bug Bash* shows a high standard of polish throughout.

with pesky bugs, who are determined to make a nuisance of themselves. That's why I always carry my trusty can of insecticide with me.

Bug Bash is a sort of shoot-'em-up, only with swarms of oversized insects in place of swarms of aliens. It's a horizontal scroller, and you can move back and forth through each level. At the centre of every level is a dustbin, and it's into this that you have to deposit all the trash you find.

You're in the guise of a lady-bird, and can walk along the ground or fly. Flying is achieved by the use of rotor blades that poke out your back when called upon. It takes a second or two for the blades to start whirring, so don't rely on flight as a way to get out of close scrapes.

It's an arduous task, all this clearing up after people. And being only a little chap yourself means that you can only manage one piece of rubbish at a time. Get shot of it by flying directly over the bin, where it's dropped automatically. All the litter on each level needs to be cleared away in order to complete it. You're going to have to make numerous journeys, back and forth, are needed to do this – something you simply don't have the energy for.

You only have a small amount of energy at the start of each level – nowhere near enough to complete it. Your energy ticks down slowly but steadily all the time. And collision with any of the other bugs in the game reduces it by lots.

Your supply can be topped up by visiting the wise old caterpillar who sits grandly on a toadstool at one end of the garden. Shoot him a few times and he'll restore your energy. It's a strange arrangement, but it works.

The pesticide spray is useful for bashing the bad bugs, too. A quick blast with the potent chemical is enough to make 'em croak. The bugs are more of a nuisance than danger, and can be fairly easily dealt with. They will catch you out a couple of times, though, so frequent trips to Mr caterpillar are all the more necessary.

Don't spend too long congratulating yourself when you manage to complete the first level. It's not

Up, up and away! A flying ant can be dealt with by a quick squirt with your environmentally unfriendly pesticide!

No, no you fool! Behind you! At big end-of-level creepy crawly needs to be defeated to continue.

over 'til you've done battle with a supa-pest – many times larger than life, who very much intends to stomp on your head. The strategy here is hit and run. Your oversized adversary has to be hit several times, and in a small, vulnerable area.

The first thing that hits you with *Bug Bash* is how polished the program is. From the moment you put the disk in the drive, what you see is a very professional-looking game. The loading screen is superbly drawn in a cartoon style that is carried throughout the game. The graphics are nothing short of excellent. The backdrops are well drawn and clearly defined. The sprites are humorous – fat, furry creatures with big bug eyes.

There are other touches too – the sky gradually darkens to indicate time passing by. Nothing has been overlooked when it comes to the visual effects of the game. It sounds good too. A suitably maddening tune plays throughout, and the spot fx aren't at all bad either.

The gameplay is fairly simple, it has to be said. There is little variety, and the task of picking litter and flying back to the bin over and over again is a wee bit tiresome. The gameplay could have done with a little tweaking, but apart from that, there's not a lot to complain about.

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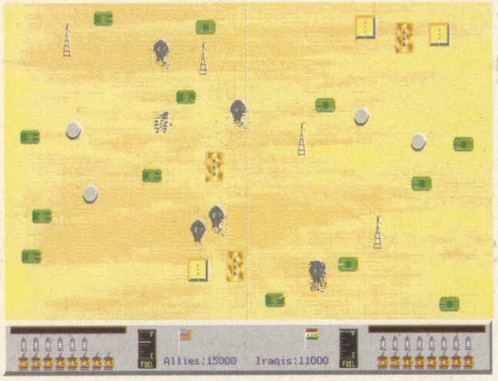
cont. from p52

Ground Wars is a a sort of computerised version of this. Two players (there's no computer version) battle it out across a war-torn strip of desert. A number of tanks are at your disposal, with which you must annihilate all your pal's installations.

There's no wimping out in this game. No negotiations for peace treaties. No surrender. There can only be a winner when the opposition doesn't have a man standing.



War is hell, but it's great fun too! Cripple the enemy army reducing their military targets to smoking ruins.

As well as tanks, each player has supply dumps, communications installations and headquarters. Blow these up for extra points.

You can switch between the tanks in your battalion and take control of any one at any time. So if your adversary is approaching an area of screen that's rich in military targets, you can select some nearby armour to intercept.

The tanks are costly to operate in terms of fuel and artillery, and visits to the fuel and munitions dumps are necessary if you don't want to be left stranded hopelessly in the desert.

Octopus-like limbs are needed to play the game, as there are no less than ten keys per player. As well as four directional movement keys, you can rotate your turret left and right, fire shells and swap between tanks. There are also keys for refuelling and rearming at the two types of supply dumps. Needless to say, such a combination proves to be confusing, and often results in costly mistakes.

There are one or two nice touches. Blast an enemy target, for example, and it remains as a smoking ruin throughout the duration of the game.

The recent hostilities in the Gulf provide a setting, and it's the allies versus the Iraqi army. Neither player has an advantage, though, in terms of superior hardware. Each player's units are placed randomly on each side of the divide that serves as no-man's land, and so it's possible that one player may have a slightly superior position at the start of the game.

Basing a game on such recent events may be a little tasteless. But *Ground Wars* is actually a lot of fun. The need to find a friend whenever you want to play is a bit of a downer, but find such a person and you won't be buddies for long!

PC 85%

Cyad

Amiga • LPD26 • Déjà Vu
25 Park Road, Wigan, Lancs WN6 7AA.
☎ 0942 495261

It's not all fun and games being a pulsating yellow blob, you know, especially in the world called *Cyad*. It's a hostile environment and no place for a nice blob like you. If it wasn't for the lure of all those glittering gems, you wouldn't be here at all!

The aim is to collect all the jewels on a screen and then head to the exit. Once you get through this then you can visit adjacent screens where there's even more riches for the taking. Of course it's not all that easy, and each screen is packed with perils. There are nasty, spiky things that kill you, and a time limit to hurry you along.

It's a puzzler, with lots of blocks that do all do different things to aid and hinder you. (Hinder being the more common!) All screens are solvable, though, it's just a case of working out what order to do everything in.

The trick, you see, is that once you start moving, you just can't stop! You have to keep going, 'til you slam into a wall. So routes have to be carefully planned in order to complete the puzzles properly.

As well as being killed by the spikes and the time limit, you're often left with a situation where the puzzle's unsolvable. In this instance there's nothing for it but to hit the 'Q' key and start the screen all over again. There are no lives as such, so you can carry on 'til you get fed up of the whole thing.

You start life in the centre screen, and when that's solved (shouldn't take *too* long) you can choose any of the four screens that are linked to it. As more of these puzzles are solved, the more your options open up. So when

Joust

PC • Academy Software
PO Box 65, Herne Bay, Kent CT6 8YZ.
☎ 0227 360808.

In days of old when knights were bold they'd ride around on giant vultures trying to knock each other off. That may not be *exactly* how it happened in the history books, but it's how it is in *Joust*, adapted from the popular Atari coin-op.

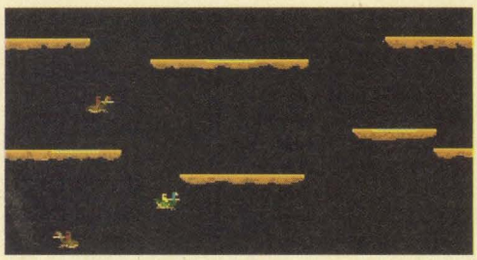
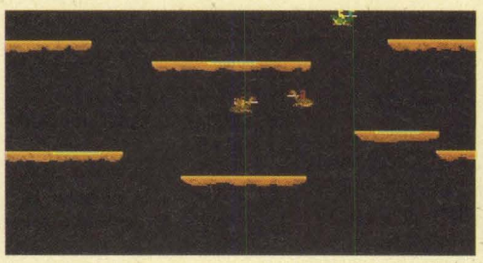
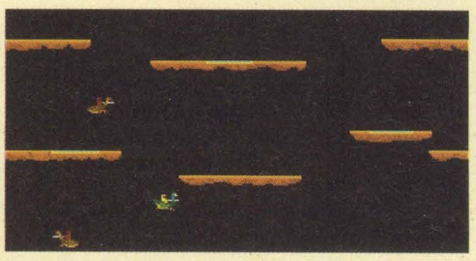
You sit astride a giant flying bird with your lance tucked under your arm. Knock the other warriors off by flying into them at a higher level, and that, really, is about the size of it.

The plot is slightly complicated as the victims of your lance turn into eggs, which then hatch new warriors if left unattended. A giant pterodactyl also appears on the scene if you dilly-dally around too much. Luckily lives aren't a problem; you can have up to 80 – a bit much really, as it takes away the challenge somewhat. A game's not too much fun if you don't even care about being killed. Best stick to *just* ten, then.

The controls are simple – left right and flap. But what a playable game it makes! It's all down to inertia. A flap in one direction doesn't necessarily make you fly that way straight away, and several such flaps are needed to get you moving properly. Mastering control of your steed is difficult, takes time, and is so much fun!

Joust is the most fun as a two-player game. You can team up with a friend against a common foe, but should one player *accidentally* knock the other off, well, I wouldn't like to be responsible for the consequences. And that's where the catch is... The unregistered version has the two-player mode disabled. You'll have to send off the shareware few to play it with a chum. Better get those cheque books out then...

PC 83%

So much for rescuing dragons in distress from fire-breathing damsels. Real knights found messing around with lances on the backs of giant vultures are much more fun (and a whole lot safer, too).

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Captain Comic (EGA/VGA), Aldos Adventure (EGA/VGA) and Commander Keen (EGA/VGA).

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SHAREWARE PROGRAMS REQUIRE A SEPARATE PAYMENT TO THE AUTHOR(S) IF FOUND USEFUL.

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cont. from p54

you get stuck in one direction, you can give it a rest and try another way. This way you don't get too frustrated being stumped by unsolvable puzzles that spoil the rest of the game.

There are 35 screens in total, and solving them all should take some time (they start off easily enough near the centre, but soon get pretty difficult).

The graphics are tiny but this means that lots can be fitted on screen at once. The puzzles progress in difficulty steadily, and they are well thought out. It's a fairly simple idea, and technically not at all outstanding. But it's one of those things that makes you think: "I wish I'd though of that!"

Tiny graphics and a simple idea. Yet *Cyad* has bags of gameplay and will keep you going for some time.

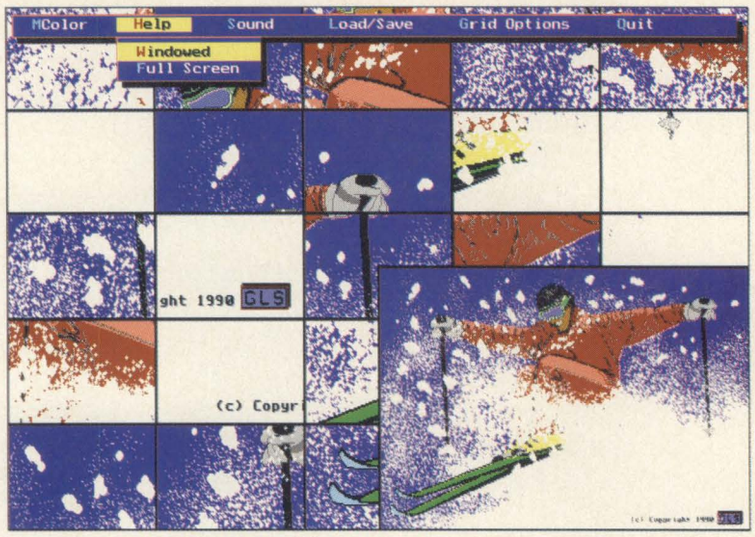
AMIGA 90%

Picture Puzzle

PC • Advantage • 56 Bath Road, Cheltenham, Glos GL53 7HJ. ☎ 0242 224340

Don't you just hate those little slidey puzzles that inevitably turn up in your Christmas stocking? Those horribly irritating plastic puzzles with sliding tiles that make up a picture when completed, but are just a jumbled mess until you do so. They annoy you so much that you just want to rip them to pieces and put them back together in the right order that way. Rubik's Cube was nothing compared to these.

You can relive your favourite nightmares with *Picture Puzzle*, a computerised version of the plastic peril. Actually, *Picture Puzzle* is very well done indeed. There are oodles of options sub-menus to access – and that's before you even start. You can select the level of difficulty by changing the number of tiles there are, from four for a very basic puzzle to well into the hundreds.



***Picture Puzzle* is a cross between a jigsaw and one of those little slidy puzzles. Swap the squares until you end up with the completed picture. The inset picture shows what you're aiming for.**

A picture has to be loaded in to begin the game proper. Three are supplied on the second of the two disk pack, but you can add your own creations as long as they're in the correct file format. The supplied artwork is cartoony in style. Send off the shareware fee and you'll get another ten for your trouble.

The tiles are *swapped*, rather than slid, which makes getting the one you want to the right place a darn sight easier. This has to be done with the aid of a mouse – you need one to be able to play.

It's very well done, very slick, and despite what you might at first think, it's quite good fun! Jigsaw-solving fans especially will like it. Get it for your Grandad!

PC 77%

Hugo's House of Horrors

PC • Disk 796 • Classic Shareware, 23 Fieldhead Close, Pontefract WF8 2ED. ☎ 0977 794876.

Penelope, the love of your life, has mysteriously disappeared after going babysitting in the creepy old house on top of the Nightmare Hill. (You know the one, number 666, where no-one who enters has ever been seen alive again...)

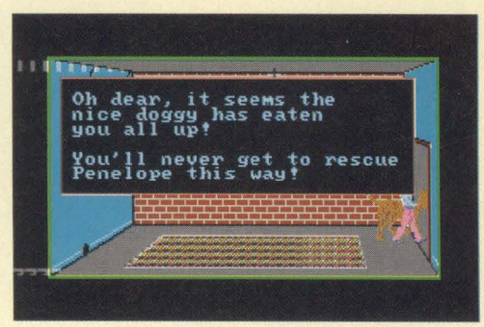
As usual, it's your job to rescue the daft cow. You've got to take your life in your hands, sneak in, find her, and get out before it's too late. Blimmin' wimmin', eh? Think I'll go off down the Duck and Whistle for a 'quick half' instead...

Hmmm, this is no ordinary pumpkin! Aha! What's this? A key! That's the first puzzle solved. We're on our way!

You start off outside the front door of the spooky-looking mansion. Atmospheric lightning flashes light up the sky occasionally, and you can't help the feeling that you're being watched... Still there's nothing for it but to enter the foreboding house. And there lies your first problem...

Hugo's House of Horrors is an animated adventure game in the spirit of *Leisure Suit Larry*. Commands, such as 'Get key', can be typed in to the computer as with traditional adventure games. But instead of replying 'I don't understand', the character on screen carries out your commands graphically. You can also move your character around with the cursor keys to move from location to location.

It has a wicked sense of humour throughout, with the hero getting into all sorts of scrapes. For instance there's a mad professor who invites you to step into his chamber. Only a fool would do so, and when I did his assistant Igor kept pressing the wrong buttons on the transmogrifier. Prof exits for a quick lie down, and you're left at half your original size.



Another sticky end. Hugo's a bit useless really, he's always getting killed and all for the love of his life.

My game ended with the snooty butler slicing my head off (and just because I gatecrashed the dinner party – a bit extreme if you ask me!)

The graphics aren't exactly state of the art, but they serve their purpose well, and everything seems to interact with everything else well enough. There's sound, and there's also a sound off option. Use it.

Hugo's is highly recommended. If even thinking about adventure games starts you pushing up 'Z's, then don't think about it – the graphical interface and humorous script will soon change your ideas.

PC 92%

UP...GAMES ROUND-UP...GAMES ROUND-UP...GAMES ROUND-UP...GAMES ROUND

Atic Atac 55%
Amiga • 17 Bit Software
Vintage 8-bit arcade action brought to your Amiga. Run through the haunted house avoiding ghosts and ghouls. It's a pity that the graphics are so terrible – worse than the Speccy!

Downhill Challenge 57%
Amiga • Amiganuts
Slalom down the slopes collecting flags as you go. Trees, logs and boulders litter the ski slopes. Collide and lose one of your five lives. Nice graphics, but limited fun.

Sealance 77%
Amiga • 1879 • Crazy Joe's
Awooga! Awooga! You're the skipper of a sub with a dirty job to do: nuke 40 cities worldwide. Nice graphics, mouse driven, but not an action game. Requires patience to get intro as it's a 'deep' game!

Shapes 76%
Amiga • 1046 • Seventeen Bit
Each level has a hole which has to be filled with geometric shapes. The number of each type of block varies on each level, making things tricky. Original and good fun!

Trukin' 62%
Amiga • 1052 • Seventeen Bit
Visit transport cafés for greasy fry-ups and chomp Yorkies all day long. *Trukin'* puts you in control of an Australian Freight corporation. Make you fortune by shifting goods. A management, rather than action game.

Plumb Crazy 77%
ST • Plumb Crazy
Build the pipeline before the gunge starts to flow. Trouble is, you don't have a choice of the pipe pieces, you have to take what's given to you. Fast, frantic and fun!

Battle Zone 30%
ST • Disk 6112 • LAPD
Two player shoot-'em-up. Nice graphics. Lots of aliens attack in different wave formations, but appear in random order, so the 'layout' can't be learnt. Slow, and not particularly inspiring.

Empire Builder 22%
ST • GAM38SE • Paradise Computers
Build your construction empire from the ground up. Menu driven game, mostly text with little in the way of graphics. Not easy to get into, and once you do it's dull.

Bolo 85%
ST • GAM61SE • Paradise Computers
Mono breakout game that works on colour machines. Beautiful graphics and effects and a novel twist to the gameplay. Bannerware, so you can only play it for the first few levels, but what an advert!

Companion 68%
ST • Caledonia PD
Shoot-'em-up with microscopic graphics. The scrolling is smooth enough and the action is slick enough to keep you going for a while. It has its flaws, but all in all, not a bad example of the genre.

Match 48%
PC • Classic Shareware
Puzzle magazine-style teasers. Deduce who's hamster likes what food with clues like 'Susan likes Jelly'. Very text-heavy confusing display. You'd be better off with a magazine instead...

Come In Peace 23%
PC • Advantage
Come in peace is a collection of ancient shoot-'em-ups. Most of them show their age – the gameplay is prehistoric too. Buy only for a history lesson on how bad games used to be!

Pharaoh's Tomb 50%
PC • Fantasia
Arcade adventure in the style of *Indiana Jones and the Temple of whatever*. Dull four-colour graphics, dodgy collision detection, and a character who sounds like he's farting whenever he jumps. Average.

Blox 67%
PC • R Wright
Simple puzzle game of matching up squares of the same type. Shove 'em together with your cursor to 'evolve' a new type of block. Novel, but none too difficult.

Xball 60%
PC • R Wright
Bounce your way around the screen to make the blocks disappear. You have hit two of the same kind in a row to be successful. Hit any other kind and you're back to square one. Frustrating!

Games Pack 48%
PC • Benetch Systems
Over 100 programs for 20 quid may *sound* like the barg of the century, but don't be fooled. The menu system doesn't work properly and most of the games are old and crap. Not a highlight among them. Very much a case of quantity, not quality.

Mix 'n' Match 73%
ST • The Other PD library
Two player 'pairs' game. Take it in turns to flip a pair of tiles. If they should match then points are scored. Colourful and fun for kids with huge memories.

Bounty Hunter 62%
ST • GAM425E • Paradise
A man's gotta do what a man's gotta do, and if that means killin', then so be it. Earn money by blasting away the bad guys. Graphics are a sight, but it's quite fun.

American Football 43%
ST • GAM45 • Paradise
American football-based strategy game. It's OK if you like text-based sports sims – in which case, why? – otherwise forget it.

ST Vegas 70%
ST • LAG10 • LAPD
Bluff your way through poker, cash in your chips on the roulette table, take your chance at black jack and waste your winnings on the bandits. A gamblers' paradise. And it's only pretend money too!

Alley Cat 64%
PC •PC Forum BBS 0366 335348
You play a manky alley cat who has to make his way through the gardens and backyards to meet your feline companion. Very simplistic arcade game.

Galaxia 80%
ST • Page 6
Stone age they may be, but the *Galaxians* can teach the more modern arcade games a thing or two when it comes to playability. Small sprites, but fast and fun.

Warfare Game 57%
Amiga • 1154 • 17 Bit
Very complicated strategy war game. You'll need to put in a lot of effort to get into this, but it's comprehensive and challenging. If you're a real wargames buff then you'll like it, otherwise steer well clear!

Wacko in Wonderland 75%
Amiga • 1209 • Virus Free PD
Well presented, but rather simple platform game. You play a gnome and have to collect fruit while avoiding nasties. Cute graphics, but the gameplay could do with some tweaking.

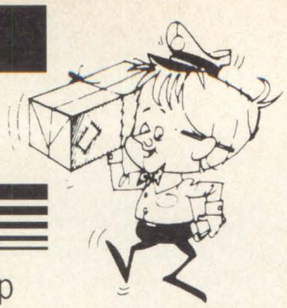
Doloman's Domain 69%
PC • Fantasia
Gauntlet-style arcade game. Only one hero can dare enter the dungeons at any time. Graphics are good, but everything moves a little too fast for a really playable game.

Flight 35%
PC •PC Forum BBS 0366 335348
Wireframe flight sim. Appaling CGA graphics, It's fast for today's generation of computers and has terrible controls. All this makes for a totally unplayable game!

Starbase 75%
PC •PC Forum BBS 0366 335348
Missile Command variant that runs under Windows. Shoot down the incoming missiles before they nuke your cities. Was brilliant in the arcades, and is brilliant on the PC.

Dungeon Master Cheat Disk 75%
Amiga •1210 •17 Bit
If you're stuck on *Dungeon Master* then this is essential!

BYTEBACK



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GAMES

BG.01 Monopoly; Classic property game. Plus: Chess, Backgammon, USA Football.
BG.02 Haunted House; Platform game. Plus: Daleks, Aggravation, Warzone..
BG.06 DGDB; Gauntlet style game. Plus: Stone De-luxe, Breakanoid and Fruit Machine Simulator.
BG.14 Invasion; STAC produced text and graphics adventure. Plus: Cluedo style detective game and Paranoia...
BG.17 Spooks; Super Pac-Man version. Plus: Pipe Panic; arcade favourite!
BG.18 Megaroids; Asteroids version. Plus: Line Up 4, Hangman, Explode, Blaster, V-Kill; Virus Killer.
BG.19 Cards; Cribbage, Poker squares, Solitaire, Klondike, Blackjack. Plus: Rubics Cube, Fun Face...
BG.20 Dungeon Master; Maps of levels showing doors, treasure etc. Plus 40+ pages of information, hints, tips...
BG.24 Give us a break; version of the pub snooker/trivia game.
BG.27 Strip Breakout; Knockout bricks to reveal a naughty picture...
BG.34 Assassin; Excellent graphic adventure written with STAC.
BG.43 Wizards Tower; Superb text and graphics adventure written with STAC.
BG.44 Zoltar II; Super shoot-em-up game with digitised sounds!
BG.45 Orbit II; Superior Arkanoid copy, compiled STOS game!
BG.47 Vegas Gambler; Professional Casino style games: Roulette, Poker, Blackjack and Slot Machine!
BG.55 Froggy; Classic road crossing game. Plus: Caves of Rigel; maze game.
BG.56 Cribbage, Checkers, Yahtzee, Target and Joust, Arcade classic!
BG.57 Dungeon Master - NEW Dungeon created using Dungeon Master Editor! Original Dungeon master required!
BG.58 Soko; Original addictive 50 level puzzle game. ST Format ****
BG.59 Bubble Trouble; Smooth Pacman variation. Jumpster; Q-Bert style...
BG.62 Millipede; very good version of the old arcade classic.
BG.64 STumped; STOS produced tactical cricket game. STOS not needed to run!
BG.65 Joust; Arcade game version. Space War; space strategy game.
BG.66 Mystic Well; Dungeon Master style role play adventuring game.
BG.67 Temon; Shoot-em-up construction kit produced arcade game.
BG.68 Die Alien Blob; SEUCK produced vertical scrolling action game.
BG.70 Hac-Man; Very professional Pac-Man version. Plus: Hero; Gauntlet style game.
MG.01 Bolo; Arkanoid variation, bat can move all over screen! (col/mon).
MG.04 Bumper Jack; STOS produced platform game. Plus Yatzy; dice game.
MG.05 Mars Maze; another excellent STOS produced platform game.
MG.08 Star Trek - Next Generation; Battle the Ferengi in this strategy game, digitised samples! (Not STE)

UTILITIES

BU.01 Neochrome MASTER; Will now load Degas and IFF format! Animation fully implemented, total keyboard control, object rotation, 10 screens, rasters.
BU.07 STWriter ELITE; high quality word processor. Fully documented!
BU.29 Label printing accessories; address, disk and cassette labels.
BU.34 B-Boot; Enables booting from drive B, address book, database etc.
BU.36 Assistant Chef; excellent recipe database for the cooks...
BU.37 Pools; expert results predictor, includes large match database!
BU.39 Fractal Zoom; comprehensive fractal generation program.
BU.42 GEM fonts; 60+ fonts for hi-res screen and Epson printers.
BU.44 .IMG utilities; convert Degas, Neo, Tiny etc. to .IMG format!
BU.45 Planetarium; Astronomy, view the stars from anywhere in the world.
BU.46 Mouse Pointer; design your own pointer! 50 shapes included! etc...
BU47 Eplan; CAD program for design of electrical circuits, documentation on disk. Print out finished circuits!
BU.48 Home Accounts; up to 3 different statements; 100 entries per statement.
BU.49 Typing Tutor; excellent English typing tutor. Includes exercises on home keys, numbers, capitals, etc..
BU.50 GEM Font Master; super font editing program, use 3 resolutions!
BU.53 Opus spreadsheet + charting program - quality shareware! (D/S)
BU.54 Amateur Radio Utilities; Morse tutor, Grayline calculator, etc.
BU.56 Your second manual to the Atari ST, invaluable reference book...
BU.57 ANI-ST (formerly Aegis Animator costing £79.90!) + GFA Raytrace demo!
BU.58 FSelect; alternative file selector, Desk Manager; Choose auto programs & accessories etc..
BU.59 ZX81 Emulator; including 38 program files! Uses the original keyword entry system. Brilliant!
BU.60 BBC Emulator, + Apple Emulator, accessories; CPanel & Disk Cache. Disk Toolbox; useful disk utilities!
BU.61 ZX81 Programs; 100+ files to use with ZX81 emulator (BU.59), 3D Defender, Pacman, Chess...
BU.64 Fractal Landscape Explorer, Mandelbrot show, Spirograph...
BU.67 Cardfile; Simple name and address database with search facility.
BU.68 Magniwriter; ST Writer version with larger text! Ideal for use on TV, for children or poor eyesight!
BU.72 STE Boot disk; enables STE to boot up in medium resolution! etc...
BU.73 Noisetracker; Conversion of the Amiga PD music program; Soundtracker! Complete with sampled sound modules.
BU.74 Electronic Bank Statement; keep your bank account under control!
MU.05 Sheet v2.0; powerful spreadsheet with documentation and tutorial, Lotus compatible, 1280 rows x 280 columns!
MU.07 Gemini; superb NeoDesk style desktop replacement! German origin.
MU.12 Hard disk utilities; invaluable aid to hard disk users...
MU.13 F-Copy 3; Superb copier, will even backup some copy protected disks! Features: Fast Format, Virus Check, Scan Disk, Multiple copy, Verify...

EDUCATIONAL

BE.01 Things to do with numbers; full working demo! Plus: Kid Publisher...
BE.02 Kidprogs; Kids Graph, Kids Grid, Kids Music, Kids Piano, Kids Notes...
BE.03 Kidprogs; Kid Potato, Kids ABC, Kid Sketch, Kid Story...
BE.05 Colourbook; Fun for the younger child, an on screen colouring book!
BE.07 Word Extract, word puzzle help. Plus: Starchart; astronomy program.
BE.08 Geography Quiz; good educational game, plus Maths Made Easy.
BE.09 Spelling Made Easy, educational program that talks to you!
BE.10 Jigsaw; load any Degas picture as jigsaw puzzle! Great fun!
BE.11 KShapes and KShapes Plus; great Fuzzy Felt style fun for youngsters!
BE.12 Shipwreck; Answer sums in this fun game! + Guillotine Man; Hangman.
BE.13 The Wolf and 7 kids; superb multi-choice adventure game for the little ones. Race Cards; give answers to addition sums to race cars. Great!
BE.14 Noah's Ark; unscramble letters to make names of animals.
ME.02 EZGrade; teachers grading prog. Molgraph demo; 3D molecular display. Easel ST demo; loads desktop picture.
ME.04 Search; good historical study program created with STAC.
BE.15 Body Shop; Learn about Human Anatomy, build skeleton and assemble organs while learning correct names.
Dot to Dot; join the dots to discover the hidden picture! Also, design your own dot to dot picture. Both programs are great fun for young children!
ME.05 Play Spell; 2 levels from this great educational platform game. B.Spell; spelling game with digitised letter sounds & speech!
ME.06 Kid Publisher Professional! Desktop publishing for youngsters! Plus; Super Kidgrid; picture maker. Kid Painter; simple paint program. Design jigsaw type puzzles with ease! (Demos; save/print options disabled!)

CLIP ART

DC.01 Small symbols; seasonal, flags, school, cars, Disney, creatures...
DC.02 Titles, headings, Christmas, Easter, Hallowe'en, golf, sports...
BC.03 Logos, Trade marks, symbols, people, food, magazine titles...
DC.04 Alphabets, Christmas symbols, lots of eyes, happy, sad, weird...
DC.08 Garfield, Beano, Dandy pictures. Picswitch enables easy view & print!
DC.09 Viz Magazine; comic pictures, plus culinary; utensils, food...
MC.01 Boys and Girls; Pictures of small children at play.
MC.04 Illuminated Letters; Fancy A to Z. Plus; Funny pictures...

MUSIC

SO.01 Midi Special; Steinberg switch, 32 track sequencer, midi channel scope, hi-tech trivia.
SO.02 Composer; enter notes from midi keyboards or computer, copy, transpose or output. Plus: Soundcomputer.
SO.03 16 Voice Synthesiser; multi voice record, filter of controllers, variable resolution metronome...
SO.05 Alchimie Jr.; powerful midi sequencer, many features! (mono) (D/S).

HELP

DA.01 66 Adventure game solutions! Including: Future Wars, Bards Tale, Indian Jones, Zork 1, 2 and 3...
DA.02 62 Adventure game solutions! Including: Leather Goddesses, Kult, Ultimas 1 to 5, Space Quests...

DEMOS

BD.26 Snowman; digitised animation and music. 1/2Mb version! (D/S)
BD.33 STE demo; See what your STE is capable of and be amazed!
BD.34 What the Butler Saw; end of the pier style fun. Slightly naughty!
BD.38 ANI ST; 2 excellent animations produced with ANI ST (see: BU.57) Juggling Lamps and the Trash Can demo.
BD.39 Teenage Mutant Hero Turtles: Excellent sample of the Turtles theme tune plus picture. Great one for kids!
BD.40 Smooth Cyber Studio produced animation featuring a space station revolving on a starry background!
BD.41 Monarch; Impressive animation with excellent graphics and music.
MD.15 Snowman; digitised animation and music. Brilliant! (Mb)
MD.21 The Brilliant UNION multi demo colour monitor & joystick required!
MD.22 UNION Demo 2; The cuddly demo! Lots of amazing animations accessed by moving an arcade style jet-man!
MD.28 Whataheck; demo collection by the Carebears again. Stunning!!
MD.30 Cyber demos; Buzy Bee, Saturday Morning Workout, Chasers, - superb animated films from Cyber Studio.
MD.32 STE Demos; 400 colour version of the Amiga classic BOING demo. Movie ST; Animation using hardware scrolling & blitter routines!
MD.35 Aliens; digitised sound and pictures from this Sci-Fi classic!
MD.38 Probe; Animation of a Voyager style space probe slowly spinning in space then moving around a planet.
MD.41 Robocop; Digitised samples of some of the more memorable sections of the film plus digitised sound! Approximately 7 minutes long and comes on 2 packed disks! (not STE).
MD.42 When Harry Met Sally; The very amusing bit from the film where Sally demonstrates to Harry how to fake...
MD.43 Star Trek; Good sample of the opening sequence from the TV series plus a superb Enterprise animation...
MD.47 Police Squad; sampled opening sequence of this great series! (Mb)
MD.48 Jungle demo; graphically super amusing cartoon style animation with sampled music and sound effects! (STE)
MD.50 So Watt; Care Bears do it again. Great sounds and mega smooth graphics.
MD.51 Dark Side of the Spoon; superb collection of stunning demos!
MD.52 Robomix Demo; digitised scenes from the film with sampled speech, sound effects and soundtrack!
MD.53 Chad Jackson; hear the drummer get wicked; Stos Maestro, Neochrome used on this sampled sound demo!

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GAMES

AG.01 **Star Trek;** Superb strategy game. Digitised graphics! (2D-Mb-3 disks).
AG.02 **Various;** Gravwars, Jackland, Pacman, Othello, Empire, Hanoi...
AG.03 **Star Trek (Agatron);** Strategy game - Tobias Richter. (2D-Mb-2 disks)
AG.04 **Monopoly;** full version of the classic property trading game!
AG.05 **Pacman 87;** Multi level version of this addictive arcade classic.
AG.06 **Various;** Cosmoroids, Amoeba, Blackjack, Backgammon, Yahtzee etc.
AG.07 **Board and Card games;** Cluedo, Othello, Klondike and Cribbage.
AG.09 **Puzzle Maker;** Jigsaw puzzles from IFF files. Plus Puzzle Pro.
AG.10 **Space Invaders;** Arcade Classic version! Plus: Lander, Amoeba...
AG.11 **Tennis;** excellent shareware sports simulation. (Mb)
AG.14 **Flascheiber;** Boulderdash style game. Almost Commercial quality!
AG.15 **Paranoid game;** Arkanoid style, including a screen designer
AG.16 **Castle of Doom;** Adventure game with graphics - beginners level
AG.17 **ST Bash;** Space Invaders style shoot-em-up, aliens are Atari ST's.
AG.18 **Golden Fleece;** Infocom quality adventure, Tron, Train, Star Fleet..
AG.22 **Return to Earth;** Elite style Space trading game, digitised sound
AG.24 **Drip;** Arcade quality painter game, China Challenge, Frogger etc.
AG.26 **Zerg;** Ultima style Role Play, World, Daleks, Callisto, Pontoon..
AG.27 **Star Trek (USA);** Strategy game. Captain the Enterprise. (2D-Mb-2 disks)
AG.28 **Quattro;** Tetris style, China Challenge, Breaker and Asteroids
AG.29 **Chess;** Superb Multi Featured! Tiles, Tetriz Two, Battleships etc.
AG.30 **Twintris;** Superb Shape dropping game! MUCH better than original!!
AG.31 **Simpsons;** vertical scrolling shoot-em-up style game! (SEUCK)
AG.32 **Legotris;** another Tetris style game, amusing digitised sound effects.
AG.34 **Tile Game;** AMOS games creator variation on the old 16 puzzle.
AG.35 **Cave Runner;** Commercial quality Boulderdash style game! Excellent!
AG.36 **Wizzys Quest;** Professional quality arcade puzzle game.
AG.37 **Ring of Zon (vol. 1);** Ultima sytle fantasy/strategy game..
AG.38 **Star Trek - Arcade game;** SEUCK produced scrolling shoot-em-up.
AG.39 **Wacko in Wonderland;** Platform game with large graphics! Cute!
AG.40 **Metagalactic Llamas;** Classic Commodore 64 game by Jeff Minter!
AG.41 **Wet Beaver;** version of original tennis game with digitised sound (Mb)
AG.42 **Games galore;** Star Trek Trivia, Pharoahs Curse, Monopoly, Mazeman, Roll On, Dad, Cosmo 2, Cat and Mouse.
AG.43 **Gridrunner;** Classic Jeff Minter shoot-em-up, Rebound; Arkanoid style, Invaders; Space Invaders version.
AG.44 **Sorry;** the board game, Flipper Missile, Blackjack, Video Poker etc.
AG.45 **Seven Tiles;** Superb Speedball style game with digitised effects!

GAMES (continued)

AG.46 **Megaball;** Brilliant Arkanoid style game with Editor!
AG.48 **Diplomacy;** War Strategy game
AG.49 **Eat Mine;** Emerald Mine copy. 80 levels of brain straining action.
AG.50 **Master of the Town;** Shooting Gallery. Smash Windows, lamps etc.
AG.51 **Frantic Freddy;** Platform game, good conversion of C64 favourite!
AG.52 **Block It;** Superb Puzzle game!
AG.53 **Nakamoto;** Great Platform game.

SOUNDTRACKER

SND.01 **Soundtracker;** Four versions of this favourite Music creation program.
SND.02 **Soundtracker 4:** alternative version + instruments disk (2 disks)
SND.05 **Soundtracker 8 Track;** Superb! Plus converter for 4 track files...
STI.01 to STI.08 Digital Soundtracker samples! 8 disks packed with 100's of files! (Buy one or all 8 for £7.99)
STS.01/02 Sampled effects! (2 disks)

EDUCATIONAL

AE.01 Blackboard Maths, Concentration Colourpad, Cat & Mouse, etc (age 5+)
AE.02 Spellquiz, Wheel of Fortune, Tug 'o' Word, Maths Test, etc. (Age 5+)
AE.03 Fractals, Desktop Calculator, Function Plotter, Evolution (Age 11+)
AE.04 Gravitywell, Weatherman, Gravsim, Airfoil... (Age 11+)
AE.05 World data Bank; CIA world map, 3D Plot, Calendar Factory, (11+)
AE.06 Talking Spelling Tutor, Speech Toy, German Language Test, Elements, Globe, Geotime (2 disks) (Age 11+)
AE.07 Educational graphics; Technical illustrations; Biology, Astronomy etc. Some animated (eg. pumping heart) Load into Deluxe Paint etc. (Age 9+)

SLIDESHOWS

AS.01 **Boris Vallejo 1;** Professional quality graphics in interlaced HAM!
AS.05 **Exodus Real 3D show;** 9 very impressive Ray traced pictures.
AS.06 **Swimsuits**; Great pictures from the U.S. Sports Illustrated mag.
AS.12 **M.C. Escher;** Animated slideshow of Eschers paradoxical artwork...
AS.20 **Slideshow Construction;** Pictures scroll up/down, fade in/out! etc...
AS.22 **Viz;** Digitised pictures from the wonderful Viz magazine.
AS.23 **Agatron Slideshow 10;** Ray Traced pictures of Star Trek ships including shots from T. Richters impending video
AS.24 **NASA;** 14 Hi-Res digitised pics of Space Shuttle, Space Stations...
AS.25 **Fraxion Slideshow;** Fantasy pictures, expertly digitised in HAM
AS.26 **Neighbours;** Pictures from TV! (Rude comments in speech bubbles)
AS.27 **Tobias Richter Slideshow;** Hi-Res pictures with a Sci-Fi theme..
AS.28 **Gorezone;** Sick Horror pictures!
AS.29 **Colourpic;** Digitised pictures produced with Colourpic and Superpic Real Time Video digitisers.

CLIP ART

AC.01 **Deluxe Paint;** lots of quality pictures in low, medium & high res.
AC.02 **Pagesetter Art;** Animals, Food, Computers, Fantasy, Holidays...
AC.04 **IFF Alphabets;** 30+ screens of character sets and surfaces...
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AC.06 **Cartoons;** People, Animals...
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AC.09 **Signs;** Titles, Logos, Headings.
AC.10 **Teddy Bears;** ideal for present labels, greetings cards etc.
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AU.27 **Amibase (v3.76);** Professional quality, multi-featured database!
AU.29 **Mash Booter disk;** 20+ utilities Boot Makers, Editors, Rippers...
AU.30 **Mash Booter Disk 2;** 25+ util's, IFF convert, Icon Maker etc.
AU.31 **Ghostwriter;** Popular, easy to use Intro and Demo Maker (Mb)
AU.32 **Label Designer;** Design and print black & white or colour labels.
AU.34 **Game Music Creator;** Midi compatible music composition program
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AU.36 **Rainbow Writer;** Demo maker, Scrolly text, 3D stars, various fonts, font edit, load Soundtracker modules!
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AU.38 **Ultimate Icon Disk;** Great icon creator, nice and easy to use!
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AU.40 **Red Sector Demo Maker;** Powerful program for creation of demos (Mb)
AU.41 **Mandelbrot Generator;** Superb, written with AMOS language.
AU.42 **Rippers Guide;** Various music and graphic rippers. Very good
AU.43 **Master Virus Killer;** Ultimate in Virus Killers, will detect over 124 different viruses & boot blocks!
AU.44 **Immune;** Use with above, will prevent disk contracting viruses!
AU.45 **Slideshow Construction Kit;** easy to use Slideshow creator.
AU.46 **Home Utilities;** Wordwright, Word Processor, SCalc: Spreadsheet. Label Print: Label Printing utility.
AU.49 **Ripped Fonts & Logos;** Colourful character sets extracted from various demos, use in your own demos/programs
AU.50 **Scene Generator;** Fractal Scene Creator with great preview facility!

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AH.01 **Adventure Game Solutions;** More than 100 including: Dungeon Master, Future Wars, Ultima 1 to 5, Sierra, Infocom, Bards Tale, Zak MacKracken, Maniac Mansion, Rainbird...Every Adventure players dream! (2 disks)

DEMOS

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AD.02 **Walker 2;** Digitised animation of Walker and helicopter! (Mb)
AD.04 **Probe Sequence;** Incoming video pictures from an interstellar probe landing on an alien planet! Amazing!
AD.13 **Walking Cat;** Amazing Revolving digitised animation of walking cat!
AD.18 **Puggs in Space;** Amusing cartoon of alien creature exploring Earth!
AD.21 **Busy Bee;** Amazing Sculpt 3D animation of a large flying Bee! (Mb)
AD.22 **Democreators.** Create your own demo's with; Bootwriter, Bootmaker, Bootboy, Boot generator etc...
AD.23 **Ship and Sphere;** Ray Trace film of space ship and glass sphere. (Mb)
AD.24 **NewTek Demo Reel 3;** Incredible professional demo of NewTek product range features superb sampled sounds, digitised animations... (Mb-2 disks)
AD.25 **The Run;** 3D film of Lotus chase through traffic with police car! (Mb)
AD.29 **Predators Megademo;** Brilliant demos including 2 games! (2 disks)
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AD.36 **Kefrens Megademo VIII;** 10 demos including; Kill the Beast (Shadow of the Beast meets Xenon 2)... (2 disks)
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AD.57 **Real Ghostbusters;** Space Ace style cartoon animation (Mb)
AD.58 **Applecus;** Ray Traced apples replace beads on animated abacus! (Mb)
AD.59 **Plasmutex 91 by TFA**; Super smooth animations! Truly amazing!
AD.60 **Magician;** variation of Juggler, excellent Ray-Traced animation! Plus: Jogger; Large ray-trace figure
AD.61 **Franklin the Fly;** Very amusing series of animations...(Mb)

To order any of the above disks simply quote the required disk numbers.
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Does it all Add up to a PD revolution?

Addware is a new company with some very big ideas. It aims to do no less than than break the commercial software companies' stifling grip on the games market by commissioning top authors to write commercial standard games to be distributed for free in the public domain. Adam Waring explains how they plan to achieve this...

There's something seriously wrong with commercially available games software. Games are overpriced, pirated extensively, often rubbish and sell in relatively low quantities. Addware is a new company with industry veteran Mel Croucher at its helm. And it reckons that it's solved the problems that plague commercially available software.

And how are they going to do this? Put it into the public domain, of course! Just look at the advantages:

- **Price:** What better way to steer clear of the high prices that plagues software than to make it free? Who can complain about the price then?
- **Piracy**: How can you pirate a game that's public domain! A game that's *supposed* to be passed around to as many people as possible.
- **Quality:** Get the best PD coders, the ones that create those impressive demos, to write the games. Their technical innovation seems boundless!
- **Sales:** Again, if there's no price to pay, then people will jump at the chance to get hold of a copy, especially if there's big cash prizes to be won!

In addition, by putting games into the public domain other problems are overcome. No longer is there any need to rely on retailers and distributors, or indeed have them take away half the profits! There's no need to have warehouses full of stocks, no need for packaging, and a lot of the need for advertising is taken away.

Everyone is free to enjoy Addware's games, without paying a penny. They will be distributed through the normal PD channels: libraries, bulletin boards and your mate down the road. However, there is a registration scheme, where you send off the fee and in return will receive the opportunity to enter a competition, with some very tantalising prizes!

The Pi-Man is the star of Addware's first release. Handsome-looking fellow, isn't he?

Making money

Addware games are free. Once you've got the disk in your sweaty little palms, you're not obliged to pay anything else. It's public domain, after all. But Addware would like you to pay. Registering for a nominal fee has several advantages. The most important of which is that you have to register to win the prize!

In return for your dosh you will receive a code number with which to enter the competitions, the next game just as soon as it's released and other assorted goodies.

Addware needs lots of people to register to succeed, but will enough register to cover the company's costs? Addware reckons so. If it can get the game distributed to the right amount of people, the percentage that need to register isn't all that high.

The intro screen to Addware's *Airmania* diak. If things go according to plan, lots of you should be seeing this.

The advertising angle

An important part of the future of Addware is advertising. Addware hopes to 'sell space' in its games to large companies. If it can convince the advertisers that by pitching their products in Addware games they will be seen by millions of youngsters with cash to spend, then the game's protagonist may very well be seen to be wearing Nike trainers and drinking cans of Pepsi for power-ups!

45p a minute

There are other means of raking in the cash too. Addware will be publicising an 0898 phone number. It will offer background information on Addware, news about winners, tips on gameplay, up and coming products, roadshows and the like. The info will be updated frequently, so keeping up can be an expensive business!

PD means prizes!

Addware wants people to play its games so much, that it's offering valuable prizes for the best players! Reach a certain stage in a game and you're put through to a tie-breaker section. Answer the questions correctly, send your disk back to Addware and you'll be in for the prize draw (as long as you've registered, that is).

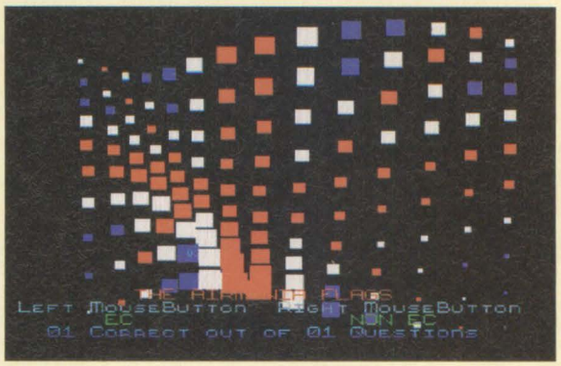
And there isn't just one, but two main prizes up for grabs. As well as the winner of the draw, the person you obtained your disk from gets an identical prize! This, too, is to encourage people to spread the disk widely.

For Addware to work, as many people as possible have to register. And the more people who get to see it, the better.

With the first game, *Airmania*, the top prize is an 'around the world' air ticket! It's up to you where you stop over, and if you don't fancy trotting the globe completely, you can elect to have as many tickets to as many destinations for as many people as you like! (Up to the value of the 'round the world' flight, of course.) This prize is worth something in the region of £1,500.

Once you get through *Airmania*, you come to a tie-breaker which based on European flags. All you have to do is answer which of the countries' flags belongs to the European Community. Guess 'em all and you're in with a chance of flying high! Most people should be able to get through *Airmania* after sweating it out for the first few hours – or nights. And with a bit of research they should be able to make it through the tie-breaker – and learn something in the process!

But if you don't succeed at first, don't worry! You're allowed to replay the tie-breaker as many times as you like 'til you get it right! So, with a bit of practice, everybody should stand a chance of winning that round the world air ticket!



This is where you win the loot! You have to correctly identify 20 flags to stand a chance. Let's see, is Britain in Europe?

Europa '92

And if you thought that was a handsome prize, just wait 'til you hear about *Europa '92* (Not due 'til next year). This is the big one where there's no less than a 13th Century French chateau up for grabs! The game is being programmed with the Freescape system (designed with the aid of Incentive's *3D Construction Kit*). The chateau has been recreated in 3D on the computer. You rush round the castle electronically, finding out all its little secrets and so forth. The eventual winner gets to keep the chateau for real!

Buying your ticket is simply a case of handing over the dosh. As you spend money the credit card gets squeezed. So much for paying on the never never!

Addware was officially launched at the beginning of October, with the release of *Airmania* on the Amiga. ST and PC owners are going to have to wait until November for versions on their machines. But this is very much a 'tester' program, designed to see just how the public responds to this new concept in software.

It features the 'Pi-Man', a cult figure from the earliest days in computing. The Pi-Man first appeared in an adventure game on the Spectrum way back in 1982. It had one thing in common with this latest project – a prize (worth some £6,000 ten years ago) was waiting for the first person to complete the game.

But to succeed, *Airmania* has to be both a good game so that it's distributed widely, and offer a tempting prize so that players are encouraged to register. The prize is certainly tempting – a round the world flight isn't bad for starters!

Challenging the Status Quo

Is putting commercial quality games in the public domain really giving the software houses something to think about? Mel Croucher thinks that they have enough problems already:

"It's a mass market out there yet *legal* (ie not pirated) market penetration is abysmal. We're not a threat to commercial software houses. We are in the realms of public domain and shareware and yes, I think that public domain and shareware *is* a threat to the commercial software houses.

"Commercial software is dead on its feet. A lot of people know this, and those who don't, God help them!"

But does he think that the Addware games are good enough to rival commercially available games for quality?

"Addware games are certainly as good as games released commercially. People are scared shitless of doing anything new. They produce the same game 53 times. I don't know how many flight sims there are out there, and how many shoot-'em-ups and beat-'em-ups and platforms. Their games are derivative, repetitive, overpriced, over-violent and distinctly lacking in humour. They stick to the same old formulas. All the bubbling talent is in the PD world. Ours might not be the best game ever written but it's bloody well free!" PD

What's *Airmania* all about then?

Airmania is the first game in the Addware range. It wasn't quite finished at the time went to press, so you're going to have to wait until the next issue for a full definitive review.

The game is set in an airport, where you seem to have 'lost' all your belongings. You have to complete a number of tasks before you're allowed to board the waiting plane, but in order to do so you must first find your missing possessions...

Baddies in the form of giant clockwork guards patrol the corridors of the airport, but can be dealt with by blowing your nose at them. A honk with your hooter sends 'em flying!

In the finished game you'll be able to buy cans of coke and hamburgers to keep your energy up, and more objects will have their part to play (in our preview version only a few were implemented).

Should you complete the game, then you get to the European flags question section. And who knows, get 'em all right and you could be boarding that plane for real!

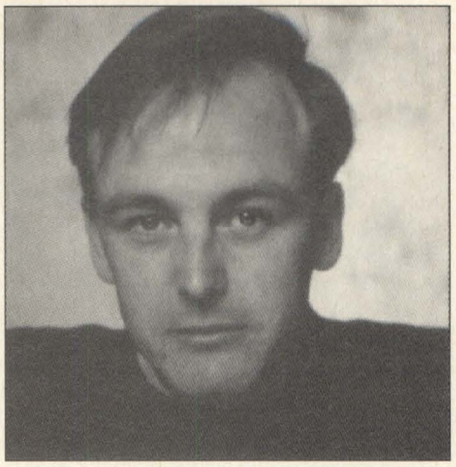
Where to get it from

Airmania will be available from PD libraries as soon as the game is released, and you'll be able to get it directly from Addware by sending them a blank disk and an SAE.

Addware, PO Box 1992, Southampton SO9 7HX.
☎ 0703 441763

The 'potted plant' disguise hasn't managed to foil those airport guards. Traditional uniform, don't you think?

Business



Increase your profit margins by cutting your outlay on expensive commercial software and discover instead what the public domain has to offer the professional computer user. Jerry Glenwright gets down to the business of business PD...

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Obscure programming and file transfer utilities aren't all you'll find out there in Freesville. Up end one or two of the larger PD rocks and you'll discover a veritable business microcosm swimming about happily underneath.

And if until now, you've actually resorted to exchanging money for serious software, there's one or two handy little lessons to be learned – stout packaging and fancy spiel do not useful software make, especially if that software has a price tag rated in the low thousands. 'Slick Power Without the Price'-type phrases usually have about as much truth as the average middle-eastern potentate's peace initiative.

Sure, there's plenty of powerful commercial software around – DTP programs, an assortment of imported CAD packages, a replacement operating system or two – but when it comes to exchanging the blue and folding for this stuff, you need a wheelbarrow and a couple of Securicor's finest to carry the cash to the store.

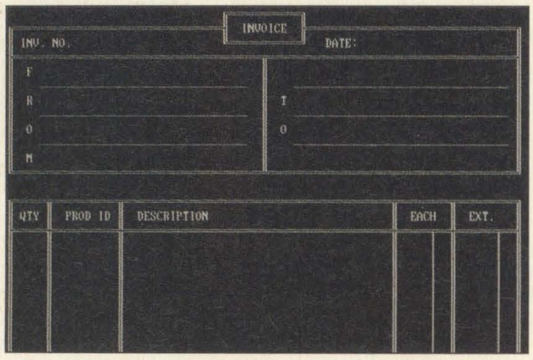
But dig deep enough – evaluate here, reject there – and you'll discover lots of exceptionally usable everyday business applications free, from the public domain. Alternatively, just sit back with a copy of *Public Domain* and let me do the digging for you, because that's exactly what I'll be doing in each and every issue...

FormGen 3.33

PC • UT19 • Alpha Computing, 32 Meadow Drive, Halifax, West Yorks HX3 5JZ.
☎ 0422 366785

Even in these days of the supposedly paperless office, a million and one crumbled missives, forms, notes, internal mail and the like float around on every desk, overflow wastebaskets and generally get in the way. The problem is that although your PC might be in its element manipulating bits and bytes from a floppy, you're not. For the average middle-executive or corner shop-keeper, paper and pencil is the only way to put out contracts or keep track of how much cash their 'mamas' are creaming off.

Hence the reason why most business programs will, at the merest hint of a print command, reduce a hundred thousand years of rain forest to a computer-generated, coffee-stained bunch of wood-pulp – entire Andean tribes are staggering around stoned out of their heads from all the extra carbon dioxide!



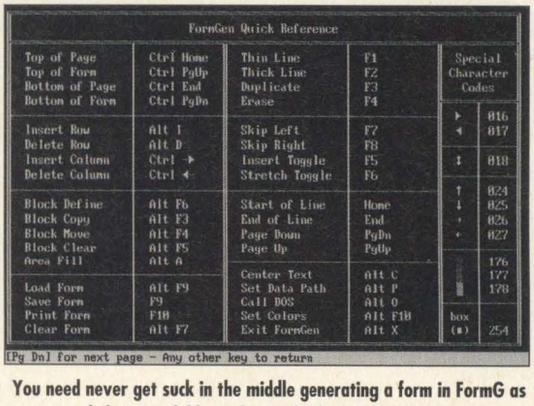
***FormGen* comes with a variety of everyday business forms which you can either customise or use as they are.**

Enter *FormGen*, one of those deliciously simple bits of software which, once used, becomes absolutely indispensable to any small – or large for that matter – business.

The program does nothing more than enable you to construct elaborate forms for every aspect of your business and reproduce them on a variety of standard printers, including the all-important Epson and compatibles variety.

Big deal, right? Most business software comes with its own built-in form generators – accounts packages with invoice forms, databases with card index-style forms and so on. These allow a certain amount of control over where to place the form's elements. But *FormGen* facilitates free reign of your ideas without imposing a single restriction. You're presented with a blank screen and a series of drawing tools and what you do with them is entirely up to you and your riotous imagination...

What that equates to is a heap of super, custom-designed forms and no waste – that's got to be good for you, and the Andeans!



You need never get suck in the middle generating a form in FormG as on-screen help is available at the touch of a hot-key.

FormGen is accompanied by around 40 pre-designed forms which you can either use as they are or as templates for your own custom-generated stuff. Many of standard forms are rather good and will probably fit your needs without any further modification.

The program behaves just like any other paint package but with commands tailored to the design of forms (obviously). You can draw thin lines, thick lines, single or double lines, or have the program draw them for

you simply by specifying a start and end point. There's also column insertion and comprehensive block move facilities and cut and paste functions, as well as a block fill, which is useful for highlighting a particular part of a form such as a 'terms' field or overdue statement.

Comprehensive and easy to follow on-line help ensures that you won't get stuck and *FormGen*'s results can be saved in a variety of 'standard' formats including ASCII, R:BASE or as a .FRM *FormGen* file.

One notable feature is the program's ability to multitask. That is, you can temporarily suspend operations and switch into DOS where you can manipulate a directory or two, edit a batch file and then, with the press of a key, return to the *FormGen* editing screen.

FormGen is one of those startlingly boring bits of software which works tirelessly away behind the scenes without a shred of praise. If you need custom forms in a flash and the Cost-o-Mint print shop provides yet another quote rated in how many children you're prepared to sell, get *FormGen* – you won't be disappointed.

PC 73%

Sheet 2.0

ST • GD371 •
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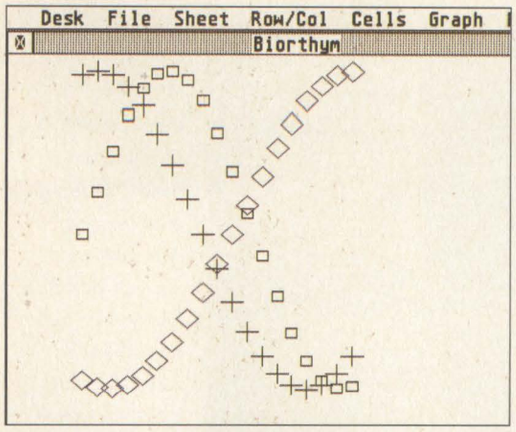
16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent, Staffordshire ST3 1SW.
☎ 0782 335650

And when you've shaved all those thirds-of-a-pence off this year's business software budget by acquiring *ST Writer*, what are you going to spend it on? Maybe first you should decide exactly how much it is you've saved, and that's where a spreadsheet comes in handy.



In *Sheet 2.0* program your results can be displayed on screen, sent to a printer or directly to a cell!

You're probably already familiar with the 'spreadsheet as the silicon rendition of the back of a fag packet on which you've scribbled complex formulae' concept, right? By seeing the figures written down in a supposedly orderly manner, it's possible to cross reference, apply 'what if?' questions and generally evaluate your finances, next year's rainfall predictions, or the kids' growth patterns.

All very well, but when it comes to making sense of the scrawl, it might as well be written in Sanskrit! Those who can read the ancient and revered Hindu script are fine but for the rest of us well, maybe a spreadsheet's a good idea...

Sheet 2.0 isn't your average screen divided into cells with algebraic equations tossed in for good measure – oh no. This baby provides a dedicated programming language with which to perform the most complex of today's financial double-dealings. Where would the infamous BCCI have been without it?

That's right! *Sheet* incorporates a hybrid version of BASIC which can be run from any cell. Write a program to display a pie-chart or graph, for example, and you can cross-reference the data and watch a graphical display of it too. With that kind of simplistic data presentation, you're never going to be in need of further explanations.

The BASIC is typed into cells just like data and executed with a special command. Output can be directed to the screen, printer or directly into other cells! Of course, when all you need is a few mundane calculations or predictions, *Sheet* will also behave just like any other dull old spreadsheet, but it's the sheer power and versatility the program provides which makes it so desirable. Console and system level commands to clear the screen, format disks and construct complex graphics complete the picture.

If you have a large collection of statistics and no method of making sense of them all, get a copy of *Sheet 2.0*. It's like having your own personal Professor of Mathematics right there in your office. Move over Pythagoras!

ST 90%

```
Input  C4: ! EXITGRAPH
@run c1
   C        D          E                    F        G        H
1  GOSUB D1   WINDOW 1                     R=0
2  GOSUB D7   CLEAR : SCALE -7,-2,7,2       FOR X=-2*PI TO 2*PI+1 STEP 2
3  GOSUB F7   PLOT  DATA J1..J7,K1..K7,0,1 J1(0,R)=X:K1(0,R)= SIN(X)
4  EXITGRAPH  GOSUB C13                    R=R+1
5  END        RETURN                        NEXT X
6
7             WINDOW 1                      WINDOW 1
8             SCALE -7,-2,7,2               SCALE -7,-2,7,2
9             ATTRIBUTE 1,1                X=-2*PI: PLOT X, SIN(X)
10            SPLINE J1..J7,K1..K7,0,1      ATTRIBUTE 3,1
11            RETURN                        FOR X=-2*PI TO 2*PI STEP 0.1
12                                          LINE_TO X, SIN(X)
13 LINE 0,-2,0,2: LINE -7,0,7,0: RETURN     NEXT X
14                                          RETURN
15
16
17
18
```

"As well as the normal cell data entry facilities, Sheet allows complex BASIC programs to be written and executed too"

Wordy

Amiga • LPD20 • Déja Vu
25 Park Road,
Wigan, Lancs WN6 7AA.
☎ 0942 495261.

The release of STOS BASIC a few years ago made an awful lot of hearts pound. At last it was possible for those without the necessary machine code skills to produce fast, fun games simply by using the *STOS* extended BASIC and compiler. It went on to become a hugely successful product.

When it was later announced that the language, would be made available for the Amiga, another few thousand would-be top programmers excited themselves to a fever pitch.

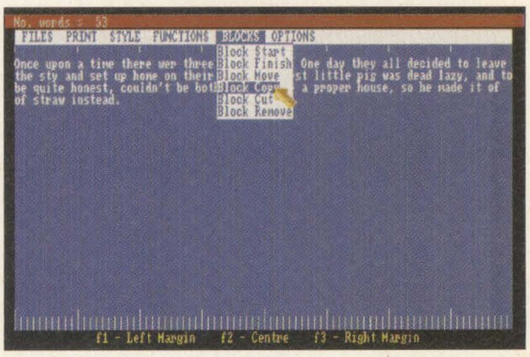
The strangest thing about *AMOS/STOS*, however, is that lots of programmers had absolutely no intention of using the language to write yet more horizontal and vertical-scrollers. What they wanted was to generate complex, serious software using the comprehensive, compiled, yet simple-to-use language to speed things up. Within months of the language's release, a thousand and one typing tutors, spelling checkers and other less than stunning 'serious' applications had hit the streets.

Such a program is *Wordy*. For some reason – maybe it's the programmers, maybe it's that AMOS just isn't powerful enough, maybe a combination of both – many productivity programs written with the aid of AMOS BASIC do for serious computing what crossing the Channel in a straight-jacket does for swimming endurance tests.

It's akin to the feeling experienced by the 8-bitters of yesteryear who handed over their money for the *Cascade Cassette 50* tape of 50 'top' games. Sure, there were games on that cassette – they loaded and played right enough – but after the 48th variation of *Lunar Lander* some owners had a sneaking suspicion that the wool had been pulled ever so slightly over their eyes...

Wordy is a no-nonsense (ie no features...) word processor whose operation feels like you're computing in a large vat of warm mud. An ugly work screen accompanied by appaling, clunky drop-down menus ensure that you really know what it was like to use an Oric 1.

Rulers (which look like up-ended combs) showing where the tab and characters will fall cross the top and bottom of the screen. A menu bar is summoned by pressing the right mouse button. Hold it down, move the pointer



• *Wordy* is a word processr that's been stripped to the basics, or, in other words, it's seriously lacking in features.

cont. on p64

cont. from p63

over the options in the menu bar and their respective menus drop down onto the work screen. Reading from left to right these provide file functions (Open Save, Save As, New and Quit), print choices including NLQ (Near Letter Quality) and draft, a word count, search and replace, block mark and move and so on.

One or two of the menu options produce further sub-menus, a nice touch in a program of this level. Unfortunately, to select a menu option, the pointer has to be moved right over the actual word rather than by moving the pointer into the menu and over the correct line – irritating as hell when you're used to the latter method. A variety of text styles including italics are on offer but you can't feature more than one style per line of text!

The program was written to support Citizen's 120D printer and should work with most other Epson compatibles. With a half meg Amiga you can expect to squeeze 12 pages of text into available RAM and around 50 pages on a 1Mb machine.

All the functions work, albeit slowly, sometimes excruciatingly so (scroll the screen and lines of text limp past like they need a walking frame), and you get the feeling that they work by accident rather than design.

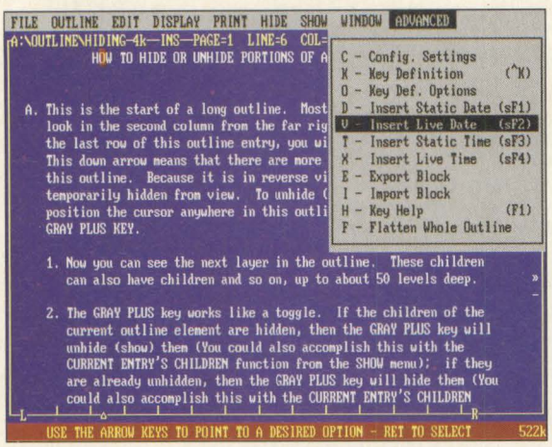
Despite the efforts of the programmer, *Wordy* remains just about usable at best. If your requirements are for something slightly more involved than a laundry list or occasional betting slip, then I advise you to leave well alone.

AMIGA 25%

PC Outline

PC • Brown Bag Software, 2155 South Bascom Avenue, Suite 114, Campbell, CA 95008. ☎ (America) 408 559 4545.

What's the biggest use of personal computers? Right, word processing! There are more machines turning out more begging letters to city traffic warden's departments, excuses to dentists, pleas to bank managers and arrangements for trysts than all the other applications put together. And what's the biggest problem for most of the people behind the keyboards? Spot on again, they can't write!



A comprehensive range of menu options make *PC Outline* a powerful tool for organising your rambling thoughts into literary materpieces.

At least, they could write perfectly well if only it was possible to marshal what they want to say into an ordered and sequential format before putting finger tip to finely-turned patina.

Most people, given a bit of time and confidence, can turn out pithy little bits of prose alongside any PD reviewing journalist. It's just that, for this latter party, the daily deadline grind ensures they develop the necessary skills in order to present what they want to say in a way that the recipients want to hear it said.

If only it was possible for the lay-writer to develop those same skills...

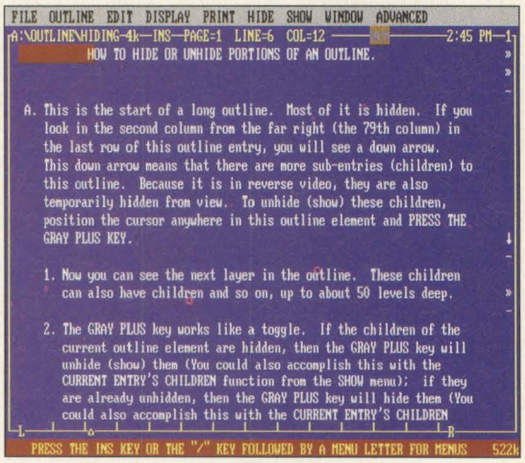
Forget it. If you don't have to turn out two thousand words a day, take my advice: don't! Instead, put that PC to work for you by running Brown Bag's shareware thought-marshaller, *PC Outline*.

What *PC Outline* does is to enable you to bash out your thoughts, feelings and so on, seemingly at random, and then organise them using a vast array of just the right tools, to form a coherent argument.

All that's left to do then is to present this finely-tuned argument as a collection of sentences to your favourite word processor and a printer. Easy.

To the uninitiated, *PC Outline* looks rather like an ordinary word processor. You're presented with a similar 'blank' screen, there's a menu running along the top, position indicators, tab markers and and a blinking cursor. To start outlining, type in your thoughts free form – let it all hang out. The secret of effective writing is to feel completely confident about your writing, and the only way to do that is to be honest with yourself. So go ahead, type in a few choice thoughts.

Already a structure is beginning to emerge – a pattern which shows which way your argument is developing. But there are one or two items in there that will have to be back-spaced over. Wait. Those deleted items might be just what you need in 15 minutes when you've exhausted the possibilities of your current train of thought. The second secret of effective writing is to discard nothing. Sure, edit – pare to the bone – but save the edited stuff for later. No need to delete in *PC Outline*, however, because you can mark words, sentences – entire paragraphs as being invisible! Anything you're not happy with at the moment can be rendered invisible with a key press. No clutter, and you end up with an orderly sequence of arguments, thoughts or what have you. And when you decide that the invisible chain of musings are the ones you really want to pursue, make them visible again with another keystroke.



***PC Outline* is very easy to use: line numbering and indents ensure that the data is simple to read and organise.**

And now the really powerful feature. *PC Outline* bases itself on a little concept known as 'parents and children'. That is, a portion of text, a sentence say, can have an independent portion of text – a child – attached to it, separate from all other text in the outline and capable of being visible or invisible depending upon what the parent is doing. Not only that, but the children can also have children up to 50 levels, so as well as organising your outline using visibility or the lack of it, you can arrange the data into a hierarchical list, each piece dependent on the parent 'above' but entirely independent of the rest of the data.

The hierarchies are depicted and sorted using line indentation so you can see at a glance what belongs where, and there's automatic line numbering, and automatic paragraph reformatting to help organise each hierarchy. Full search and replace, block mark and move, margin control and printer support help to make *PC Outline* a thoroughly usable tool.

The program can import and export data to and from popular word processors and features multiple on-screen windows (resized at a stroke, and user-defined), cut and paste between windows, macros, comprehensive sorting and so much more that I'd need an organiser before even daring to attempt to tell you about them.

And there's one final impressive feature – you can make *PC Outline* memory-resident so that it will pop-up just when you need it most, no matter what else your machine is currently processing. In practice, the pop-up feature works exceptionally well and a program that foiled its attempts to appear could not be found.

Useful, especially for those who need to present information in a coherent and winning manner – students, dissidents, Marxist/Leninists and so on. *PC Outline* is shareware and a registration fee will bring updates and technical help.

cont. p66

PC 80%

PUBLIC APOLOGY

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cont. from p64

Spell/ST

ST • 1642

South West Software Library, PO Box 562, Wimborne, Dorset BH21 2Y.

What's the second most boring bit of software in the known universe? The spell checker! (Calendars are definitely the most boring.)

Think about it. Some guy sits hacking late into the night for gosh knows how many weeks only to come up with ... yet another spell checker – masochists or what? And not only that but the rest of us, the recipients of these dull doings have to suffer using them, complete with self-congratulatory messages and dialogs like this:

Really Quit?
(Isn't this a great spell checker? Took me weeks you know...)
QUIT CANCEL

OK, OK, so spell checkers are useful and necessary adjuncts to your collection of serious stuff, but they're definitely uninteresting. Which is why you must be told about *Spell/ST*, a neat little crock of code which does for spell checking what wings did for the Wright Bros.

Spell/ST is accompanied by a dinky little sidekick saddled with the ludicrous and open-to-smutty-sniggers moniker of *MakeDict*. Despite the appaling name, however, this enables you to create your own, custom dictionaries. Technical report writers, students, doctors, poison-pen letter writers and the like all use words which, although they're probably perfectly familiar to their respective 'owners' tend to be misunderstood by the majority of simple silicon dictionaries. The result is that, when spell-checking, you're continually bombarded with what are supposed to be spelling errors but which in fact, are unrecognised words.

MakeDict cures the problem by building ancillary dictionaries full of the junk jargon awash in your business or line of study. You can have up to three of these ancillary dictionaries open at any one time so there's plenty of scope for obscurities.

```
Desk File Options Dictionaries
                    Report
Press any key
Duplicate word "SPELL.ASC" in line 81
Duplicate word "Comments" in line 192
Duplicate word "stare" in line 651
Duplicate word "pose" in line 652
Duplicate word "divide" in line 655
Duplicate word "affect" in line 657
   826 lines  68.0 seconds   4062 words    252 unrecognised (117 unique)

     Words spelt inconsistently

word stem      line(s) in which word or variant occurs
  recognise      120,125,131,138,143,185,264,266,304,307,313,etc.
  recognize      143

     Unrecognised words, in alphabetical order

a-r  acious  acity  acy  ancy  ASCII  atari  atari's  ation  backslash  BBS
More...
```

In an attempt to make spellcheckers more exciting *Spell/ST* generates analytic reports and they can be read on-screen or saved to disk.

```
Desk File Options Dictionaries
                    Report
Press any key
   16 lines  0.0 seconds    61 words    13 unrecognised (12 unique)

   Unrecognised words, in alphabetical order

computerese  DRT10  e-mail  internet  JANET  low-resolution  makedict
NSFNET-RELAY.AC.UK  PHX.CAM.AC.UK  program  SPELL.ASC  UK.AC.CAM.PHX

End of report.
```

As far as spellcheckers go, *Spell/ST* is about as good as you can get. It can be easily customised if you're prone to using odd words.

The main dictionary comes with just under 55,000 words of standard English including American English but not those words which are exclusively American such as the dreadful 'thru'. In addition, there are 5,000 proper names and places and 2,500 computer buzzwords, all in all over 60,000 words of the kind of utterances you're making every day.

Spell/ST is happy to read *First Word*-generated .DOC files, picks up consecutive words which are the same

ST Writer

ST • GD17

Goodman Enterprises, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent, Staffordshire ST3 1SW.
☎ 0782 335650

In the days when Atari was still flogging 8-bits around the industry, *AtariWriter Plus* was the word processing Hostess with the Mostess – a fully-featured text processor with a variety of functions unavailable elsewhere. Built-in spell checking, multi-columns, hyperfast scrolling and so on, all helped to make *AtariWriter* one of the finest word processors available for any 8-bit machine. And it didn't stop there. When the ST was launched, the same happy band of Atari programmers decided to convert their popular processor from its popular predecessor and *ST Writer* was born.

The trouble is, they forgot one small thing. The main ST selling point for many users was it's simple-to-use front-end. That WIMP Desktop went a long way to persuading dedicated Spectrum users and the like to part with the dibs and upgrade. Unfortunately, *ST Writer*'s authors forgot to bolt on the stunning point 'n' click interface and the result... well, let history speak for itself. Today, a million and one Macalike text editors vie for your attention while *ST Writer* is available free.

An ignominious ending? Not a bit of it! *ST Writer* is a scorching bit of software at which only complete beginners would turn their noses up – and even they can join in the fun because the latest incarnations of the PD's favourite processor can be transformed into a GEM-based editor at the click of mouse.

ST Writer's authors didn't bother with GEM because they wanted to create an ultra-fast program which would benefit anyone with a defined need for efficient text editing – and that's just what they came up with.

The program opens with a screen not seen outside an 8-bit Atari since the early 80s. It's a kind of list of the program's functions accessed by typing the first, highlighted, character of the function. To create a new file for example, type 'C', open an existing file by entering 'L' (...for Load), 'I' to get an Index (ie a directory listing) of the files on the current disk and so on.

This menu screen has one or two oddities too. As a legacy of its humble 8-bit beginnings, *ST Writer* has built-in file transfer software designed to

```
ST WRITER™ ELITE
Copyright © 1990 by Atari Corp.
In the public domain.  Not for sale.

CREATE File        LOAD File
DELETE File        PRINT File
EDIT File          SAVE File
FORMAT Disk        RECEIVE AtariWriter™
INDEX of Files     TRANSFORM Colors
HIRES Flip-Flop    QUIT
```

The kind of single character entry menu screen unseen outside 80s' 8-bits...

```
                    temporarily  turns
                    off formatter and prints
                    the character in your file.

Double-column printing:

2nd col. left       Control M
margin

2nd col. right      Control N
margin

Elongated print     Shift F9 before and
                     after text

Form printing       F9 for each blank in form

Headers and         Control H for header,
Footers             Control F for footer, then
                     text and [Return] for each line

Justified and       Control J and 1
nonjustified        (justified) or 0
margins             (nonjustified)

Left margin         Control L

Line spacing        Control S

Merge files         F8

Mouse on            Click mouse button

Mouse off           Click on Mouse in Options menu.
```

With a hi-res monitor, the program can be toggled into compact display mode to cram even more on screen

and generates reports to a disk or printer. You can do frequency counts and get other statistics, trap split-infinitives and log all the unknown words, in context (ie with the surrounding text), so that they can be added to the auxiliary dictionaries

The authors of *Spell/ST*, Murray Langton and David Tilley, are remarkably candid and self-effacing about their life's work and readily admit to it not being tested on an STE or TOS versions later than 1.0 (1985). They suggest that users might write to them to report any bugs they find, but you get the feeling that it might be difficult to reach these guys – they're probably holed up somewhere for the next couple of decades designing some fantastic piece of software like one of those really amazing clocks that are displayed on the menu bar and don't turn off when you run a program.

Sorry guys, but spell-checking authors leave themselves wide open to bit of lampooning.

But I admit, it's a good program that works well, quite fast, picks up 'errors' such as the consecutive words thing which many others skip over and best of all, it's free. Just one thing – surely the only way to use a spell checker is as a DA while still inside your favourite word processor? It's a bit of a pain to quit, spell check, then re-open the editor to make corrections. Still, not bad.

Live life in the fast lane! Move into the man's world of spell checking! Get *Spell/ST*...

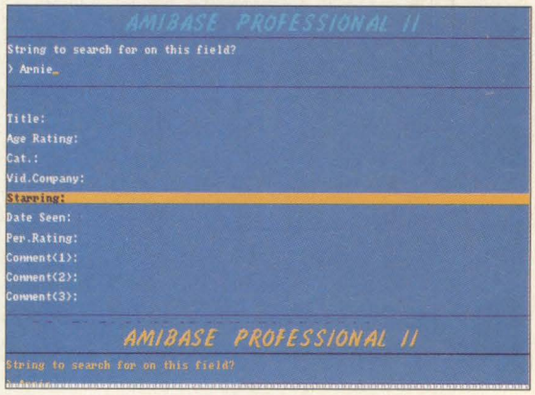
ST 55%

AmiBase Professional II

Amiga (with 1Mb) • 1036 Amiganuts United PD LIbrary, 169 Dale Valley Road, Hollybrook, Southhampton. ☎ 0703 785680.

Why is it that more and more Amiga PD programmers are limiting their wares to distribution by only one library? Before going anywhere with this program, you're warned not to even think about including it in your PD library – jeez! What's PD all about anyway, huh? KAG Productions (why am I reminded of housing estates and hypodermics?) limits its program to the Amiganuts library only. Beware!

On booting up *AmiBase* and the dire warning about distribution is displayed. Then the screen clears and an appalingly gooey message about how Amigans must help each other otherwise they'll just fade away appears ("Oh-Oh! Didn't help a fellow Amigan yesterday, better trash my Amiga immediately!"). Finally you're offered instructions or the program proper.



***AmiBase Professional II*: a moderately competant database which does little more than allow for field searches.**

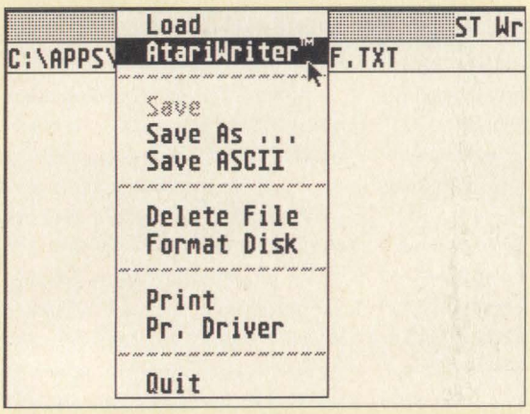
DON'T choose to read the instructions unless you're the kind of person who hands over the entire contents of your wallet to blind accordian players and the like. Is Keith A Grant of KAG Productions chronically short of friends or what? Every other line is a plea for you to write or telephone him – as if you didn't have something better to do than waste cash and time calling programmers. Problems with the program, your Amiga, your Mother, your sex life or financial situation – this guy wants to know it all!

So, skip the sorrowful cries for recognition and march straight on into the program, head and prospective database data held high. Do so, and you'll be – reasonably – well rewarded. Bearing in mind what I said in the *Wordy* review about the somewhat over-rated abilities of AMOS

cont. on p68

import *AtariWriter* files from 400/800/XL/XE. Maybe only one in a thousand users will need this feature, but if you're that one, you'll thank your lucky stars!

Other functions on the menu screen include disk formatting and something called a hi-res 'flip-flop' that changes the size of the font so that users with hi-res monitors can squeeze more into their screens. Files can be loaded, printed, deleted and so on and you can invert the screen colours.



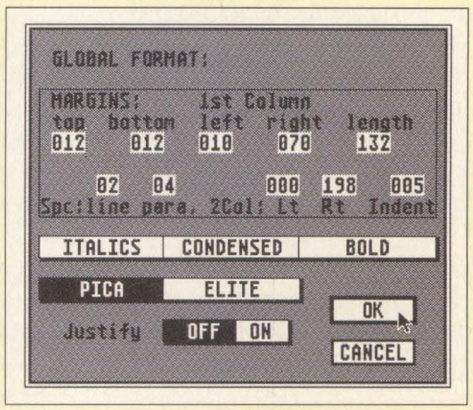
And for the WIMPs among you, *ST Writer* provides a point 'n' click front-end of sorts...

There's a field running along the bottom of the screen which displays prompts, asks for input, and provides helpful messages.

If you're one of those users who suffers cold turkey whenever the Desktop is withdrawn, a simple click of the mouse on the menu screen will switch the program into GEM mode. This is a halfway measure between GEM and non-GEM operation which enables you to use the mouse and drop-down menus for most of the file, printing and import functions. Editing, however, is still performed in a non-GEM environment.

Elect to create or edit an existing file and you're moved to the editing environment just mentioned. This is definitely not for WIMPs. Blank black screen, blinking cursor, and the only control input is via a command line and hot keys at the foot of the screen. That said, an hour two of hacking in threatening letters to debtors and you'll be *ST Writing* alongside the best of 'em.

There's a comprehensive range of search and replace, block marking, cutting and pasting operations, lots of shortcuts to navigate long documents, global formatting, Epson printer support and so on, and all of them performed at lightning fast speeds – scroll screenfuls of text in *ST Writer*, and it whizzes past in a blur of hazy script.



Comprehensive global formatting and a host of other features help to make *ST Writer* powerful and versatile

The program is accompanied by a useful disk-based help file, example document templates, a 'quick reference card' that can be printed out and stuck up next to your machine and another which can be stuck above the ST's function keys.

All in all, *ST Writer* is an excellent word processor and one which, in its latest 'Elite' version is unbeatable. There are no major bugs to speak of with the exception of an occasional reluctance to respond to the mouse, but that's to be expected with a program whose WIMP tricks were bolted on as an after thought.

And the bottom line? Forget Macalike WIMP word-pros with fancy front-ends, *ST Writer*'s where it's at – text wise!

ST 90%

cont. from p67

and how they relate to programming serious software, *AmiBase Pro II* is a moderately competent database which will repay careful attention to the set-up procedure.

What's that? Well before using a database, you have to set it up. That is, you've got to tell the program how many fields (the constituent parts of a record) you require, whether you'd like to add pictures to your database and so on. *AmiBase Pro II* allows up to ten fields, so you could enter say, MAGAZINE, ARTICLE, AUTHOR, DATE, PAGE, to keep a file of your favourite features from *Public Domain*, *Amiga Shopper* and *ST Format*. The program offers passcode protection for sensitive files and you're prompted for a suitable example on the set-up screen. A major drawback, though, is that you can't use letters in the password; it has to consist entirely of numbers! And they call it *Professional*?

Once there's a few records stored in the database, you can perform searches including useful multi-field searches (for example, find all *Amiga Shopper* records which feature articles written by Earnest Hemmingway...), sort in alphabetic or numeric order, delete or print records either singly, all together, or in a range specified by field information and generally manipulate the database in the traditional manner.

So what's the bottom line? Not bad; it works – although with obscure and unrelated key presses ('Z' to summon the search and replace menu), poor password protection and one or two other cut-down features. KAG appears to believe that simple field searches and the like are the last word in database design. Has this man been running a ZX81 in Albania for the last ten years? It's time to come in from the cold KAG Productions...

AmiBase Professional II is OK if all you need to do is keep a little database of matchbox labels or stamp club members but the eponymous 'professional' users would be advised to look elsewhere.

AMIGA 40%

SageWords 4.00

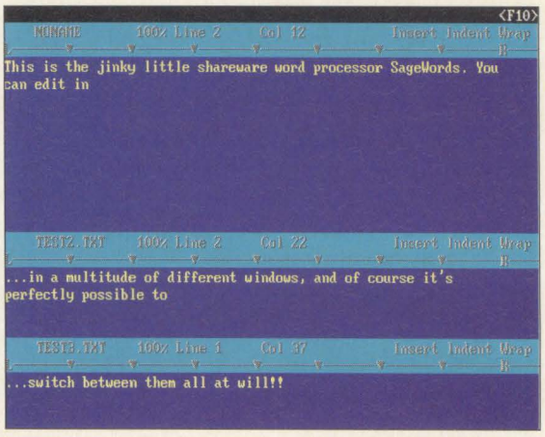
PC • 256/QA
Softcell Services Shareware, 25 Maywood, Brynna, Pontyclun CF7 9PZ.
☎ 0443 238630.

Outline's done its stuff and you're ready to begin writing. But what should you use? A few hundred quid's worth of *WordStar*? Half a grand for MicroSoft *Word*? Both programs do a fine job but then, considering how much they cost ... better still, don't consider it – you'll shudder at the thought. Even better, don't bother to buy them at all.

Yep, you need a word processor, who doesn't? But the cognoscenti know how to get one and keep their accounts pecunious intactus.

SageWords is a no-nonsense menus and windows-based word processor featuring multiple document processing, superior on-line help, drop down menus and more.

The program opens with a screen reminiscent of MicroPro's Mother Of All Word Processors, the (in)famous *WordStar*. *SageWords* is completely uncluttered, there isn't even a menu – at least, not until you summon it with



***SageWords* offers powerful features such as multiple open documents and you can switch between their windows at a stroke.**

HomeBase

PC • Brown Bag Software, 2155 South Bascom Avenue, Suite 114, Campbell, CA 95008.
☎ (America) 408 559 4545.

Even the most inexperienced PC user user will probably be familiar with the terminate-and-stay-resident (TSR) concept. That's when the PC's current application or operation is suspended and another, completely different and separate program takes control of the machine, usually after being invoked with a hot-key combination.

One of the most popular, certainly the most widely known, TSRs in recent years is *SideKick* from Borland. This is a little pop-up program which provides a calendar, calculator, notepad, ASCII table and the usual junk miniature programs which, after the first 'gosh-wow look what it can do' session simply terminates and never again becomes resident.

Sure, *SideKick* and the rest are excellent programs, it's just that many PCers forget to use them! You know what it's like; you're half way through the paper-based address book before remembering to summon *SideKick*, and if the machine's switched off, well, you're not going to switch it on simply to get someone's phone number, are you? Hard drive spinning up to speed, disks rattling away and all so you can make a date Saturday night – it's more than your love for the PC can stand, right?

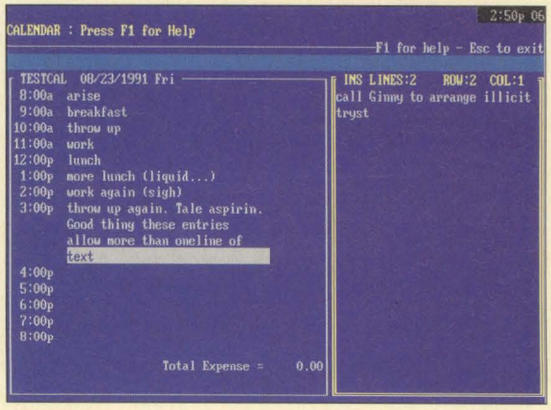
These programs take up valuable memory space too. Gone are the days when you could fit 'em into 50K. Today's applications eat up the megabytes! Give 100K or more to a TSR and you've effectively shaved that amount from your PC's RAM.

The bottom line, then, is a trade-off between usefulness, usability and RAM requirements, and most TSR's ultimately lose the argument.

Enter Brown Bag Software with its shareware offering *HomeBase*, a TSR to beat all TSRs. State-side *PC Magazine* said, "...it delivers the most bang for the buck among desktop organisers..." and boy am I inclined to agree!

What this desktop organiser doesn't offer, you definitely don't need. Fully-featured word processor, database facilities, excellent compact comms functions (which will churn ceaselessly away in the background while you continue to generate cash or whatever you do with that command-line monster on your desk...), cut and paste between applications, and, of course, the standard calculator, address book, diary, calendar, DOS functions ... the list goes on.

What really sets *HomeBase* apart however, is that it's modules do not replace those normally associated with the real ie 'unelectronic' world, such as scribbling phone numbers on the back of a fag packet – the kind of stuff you're not going to bother to get the 40Mb hurtling around at 1,600rpm for, but instead, pop-ups which replace the functions you'd want to use when the machine is switched on anyway – a good text editor, powerful database and so on. That's what makes

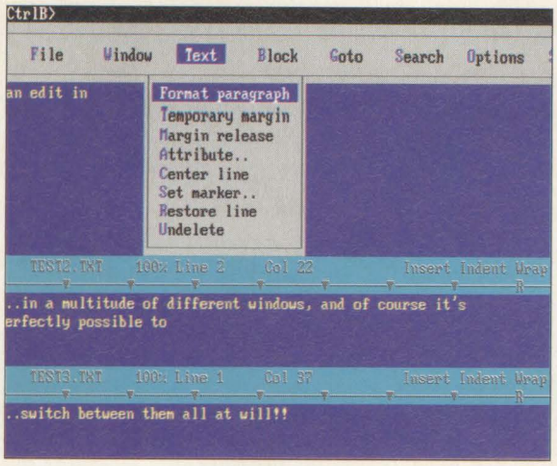


A calendar can be broken down into monthly, weekly or daily format and there's a free-form 'To Do' list feature, too.

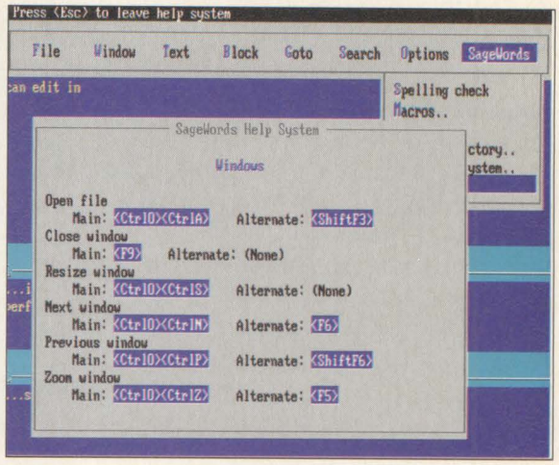
The *HomeBase* opening screen is a rather low-key affair which belies the marvellous program that is to follow.

the F10 key, just a few tab position markers and a flashing cursor. What eventually fills the screen is up to your fingers and brain.

Of course, bare screens are all very well, but most of the applications which provide them usually rely on command-key sequences in order to control the program. Commands such as Save, Load, Block Mark and Move, Cut, Copy and Paste all have to be initiated somehow, and remembering how to perform them can be a real pain in the neck for those not in the know. And that's where SageWords comes into its own. Hit F10 and a menu bar appears which provides several levels of menus and sub-menus offering all command sequences and comprehensive on-line help.



A menu bar can be summoned in *SageWords* by pressing F10. There are a variety of drop-down menus containing the program's many features.



Full on-line help completes the picture, ensuring that *SageWords* is the only word processor you'll want to use.

You can scroll through the drop-down menu options using the cursor keys and they're cyclic, so if you reach the bottom and keep scrolling, you end up back at the top again. You can also elect to have each menu option show its keyboard shortcut at the top of the screen so that as you use the program and become familiar with it, you'll also learn how to control it without recourse to the menus – its like learning Swahili from a cassette tape under the pillow while you're asleep. And if you get really stuck, pressing F1 summons help for the current selected command.

Not that all this is really necessary anyway, because *SageWords* is intuitive, simple and a pleasure to use. Multiple open and editable files, user-defined windows between which you can switch back and forwards with a keystroke, macros, function key control and more ensure that you'll probably never need another word processor.

Omissions? A Few. There isn't any spell checking unless you have Borland's *Turbo Lightning* RAM-resident spell checker in memory and the print formatting commands are a little obscure (but then, which print-associated format commands aren't?), but on the whole, *SageWords* is kind to its users and friendly to a fault.

In just four words *SageWords* is fast, fully-featured and recommended.

PC 75%

cont. on p70

HomeBase well worth its 180K of allocated TSR memory (in fact, with the help of a little chicanery known as 'swapping', *HomeBase* rarely requires more than 80K of RAM). That said, even the *HomeBase* junk programs are infinitely better than anything else available. Let's take a closer look at them.

Calendar programs, don'tcha just love 'em? Boring, useless and unused, except that *HomeBase* provides two independent and nameable calendars that will automatically remind you of important events, allow cross referencing and queries such as, "When did Jerry last take his editor for lunch?" and much more.

The calendar can be shown in a monthly, weekly or daily breakdown (the daily format is particularly good...) and there's an accompanying 'To Do' list which pops up as a prompt when you're doing other things with your machine.

QuickTerm, the *HomeBase* terminal, is simple, sure, but very, very effective. It can automatically answer a call while you're tinkering away with some other application – MicroSoft *Word* or the like – prompt you to take the call or offer to cope on 'auto-pilot'.

With functions like that on offer, you can forgive *QuickTerm* its shortcomings such as providing only ASCII and XMODEM for file transfer. *QuickTerm* autodials numbers from the address book too, so that the only time you need to pick up the phone is when the person you've called actually bothers to answer.

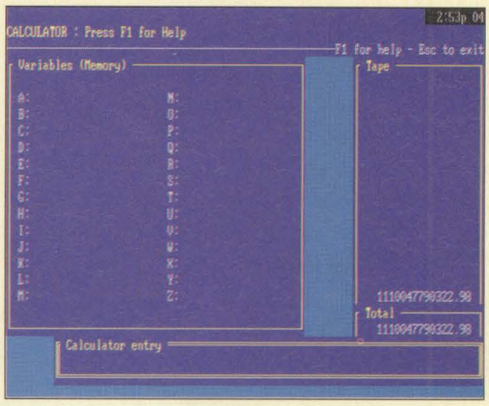
HomeBase's DOS functions enable you to garner comprehensive information about four separate volumes at once, as well as perform the usual move, rename, delete and copy functions. You can select sub-groups of files, sort and manipulate them at will.

Open up the calculator, and you can use any or all of 26 variables to perform 'scientific' level calculations, pasting the results into any application on your system.

Alternatively, lift figures from your favourite spreadsheet or other program and paste them into the calculator for instant processing. There's even a hex mode for programmers.

The comprehensive text processor has full search and replace facilities, comprehensive navigation hot-keys, time insertion and block manipulation.

The database facilities in *HomeBase* are very impressive. There is no limit to the number of databases you can create or their size. There is also a handy accompanying example template and a built-in query language for instant data retrieval with 'what if?' referencing. The databases are powerful, work well, integrate perfectly with the other *HomeBase* modules and your system's applications and basically, there's nothing more you can ask for, is there?



The ubiquitous calculator. Every pop-up ever invented has one but few compare favourably with the *HomeBase* version.

All of the *HomeBase* modules can be accessed via a Shift-Alt-H key combination and subsequent menus or simply by pressing the correct hot-keys for the module you want to use. Brown Bag Software, famous PC shareware programmers, offers unlimited technical help for a year to the registered and you can hand over your name, rank and serial number in any of a number of European countries using the local currency (ie in London with Sterling) or by calling Brown Bag direct, in the States.

HomeBase also features over 100 help screens covering every aspect of the program and you can call these up at will from within any module by pressing F1. The program is robust, powerful, fun to use and free – at least initially. Use it for while, you'll be hooked, and a registration fee will bring updates and more information. Make no mistake, *HomeBase* is an essential piece of software.

PC 95%

cont. from p69

MultiWord 1.1

PC • 277/XT
Softcell Services Shareware, 25 Maywood, Brynna, Pontyclun CF7 9PZ.
☎ 0443 238630.

Here's a useful little adjunct to any PC word processing system. *MultiWord* is an on-line thesaurus for those whose copy of *Roget* disappeared long ago into the 'Second-hand: For Sale' corner in the Student's Union Bookstore.

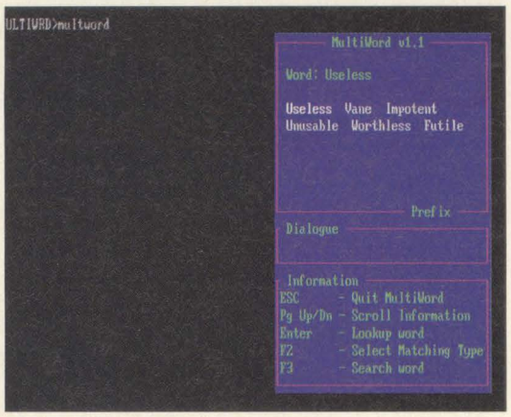
MultiWord works fine as both a transient or TSR program. That is, you can fire it up from the command line or, by bunging an extra line or two into your AUTOEXEC.BAT file, install the thesaurus as a pop-up program. With the latter, you can use a hot key combination to summon it just when you need it most – while word processing, without having to quit back to DOS.

The program is accompanied by a compressed data file (decompressed on the fly...) containing around 9,000 words and 62,000 synonyms. Sounds a lot? It isn't. With only 9,000 words and their synonyms, it's easy to reach the program's limits. Search for 'useless' and one of the synonyms you're presented with is 'impotent', but search for impotent, and you're regaled with the 'Word not found' message – no word, but you sure get the feeling...

That said, *MultiWord* works very well with the words it does have. Type 'Multword' at the keyboard or hold down the key-combination and a neat little window appears on the right of the screen comprising three boxes. The uppermost is where you type in words and where synonyms are displayed. The middle box provides messages such as the 'not found' thing mentioned earlier, and the lower box is an information window in case you forget any of the program's keystrokes or want to know who the authors are.

If you need a thesaurus, this one works, and works well. It may be a bit limited on word power, but it's fast and flexible.

PC 55%



***MultiWord*: Ever stuck for words. Then what you need/require/crave/wish for/have need of is a thesaurus.**

HYPE!

ST . WooolleySoft, Humblesknowe Cottage, Ramoyle, Dunblane, Perthshire, Scotland FK15 0BA.

A massive innovation in the last few years has been the introduction of hypermedia. This involves gathering output from a variety of sources such as word processors, photographers, musicians, video technicians and so on and presenting it all as one randomly-accessible, homogeneous whole.

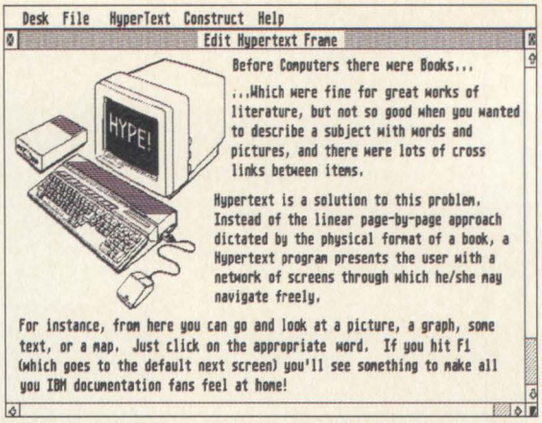
You can read a piece of information, say the fauna and flora of the Scottish highlands, elect to view associated pictures, listen to the sounds you'd hear if you were actually there, summon information on related topics and generally find out more about the subject by blending popular media sources. Hunky-dory, right?

Well, yes, except that 'hype' is the watch-word where this exciting new computer exploration system is concerned. Heralded as the break-through for sophisticated communication, hypermedia is yet to find an affordable and usable outlet. Sure, you'll read the enlightened discourses of a thousand and one hype-blinded journos trumpeting the hypermedia cause, but can you find it in the shops? Do you use it in the office, at school, in your lavatory?

No?

Hypermedia, at least until unravelled for the masses and made affordable, primarily remains a handy standby for hard-pushed editors to use as an easy way to fill a blank couple of pages the day before deadline.

Oh, there's nothing actually wrong with hypermedia – it's a really funky concept – but unfortunately, too far removed from the very people it's supposed to be addressing. Originally available for Apple's Mac range, you'd need a back-hander from BCCI to afford it.



As well as mixing text and line art imported from a variety of popular packages on screen...

At least, that is, until now. With WooleySoft's PD rendition *HYPE!*, you can see what all the fuss about right there on your ST.

At its most basic level, *HYPE!* works rather like a card file. Each card is followed by another which might be a continuation of the previous card or the beginning of an entirely new topic. But unlike a simple card file, *HYPE!* can be accessed in any way you choose – the program is not sequential. Which means that you might begin on card 1, read to card 14, skip to card 27, back to 16 and so on until you've absorbed the information provided by that collection of cards (or 'stack' in Apple nomenclature). As an example, let's take a journey through a typical stack.

Card 1 or the 'top' card introduces us to the topic of car maintenance, and gives a general overview of the subject. There's a picture of an engine on the card, a picture of someone listening to an engine with a piece of wood and a picture or a wiring loom. Fine. You could simply read the first card, then the next and so on until you reach the end of the stack. But that picture of the guy listening to an engine with a stick looks a bit interesting – what was that all about?

Click the picture in question and you're transported to a sub-section of cards detailing engine diagnostics and specifically, listening for knocks, rumbles and so on. Three cards into this sub-section, and there are some graphic representations of what the various noises sound like (a square wave, sine wave and the like). Click one of these, the stack makes a link to another card, and you're regaled with a digitised sound sample of the actual noise! See how your car maintenance tutorial is progressing? Therein lies the power associated with hypermedia. Weaving several source strands together into an easily digestible and supremely versatile teaching tool.

***...HYPE!* also contains dramatic digitised pictures which you can use to really really get your message across.**

And it's not just for education either. *Cosmic Osmo* is one of the most fun games available for the Mac yet it's a *Hypercard* stack (*Hypercard* is the eponymous Mac version of Woolleysoft's *HYPE!*). You can explore, interact, listen to music, watch animation and so much more.

Sounds great? It is and the ST's version is – surprisingly – a spirited effort. Woolleysoft has put an awful lot of work into creating *HYPE!* and the results show it. You can mix sound,

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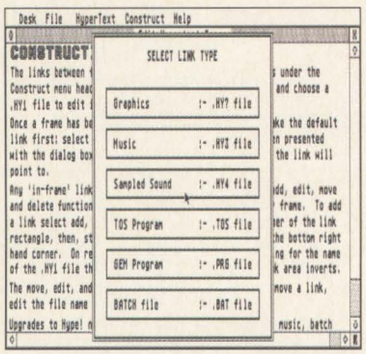
cont. from p70

text and pictures freely, define links between cards, provide on-card buttons and generally build interesting, exciting and fun stacks.

HYPE! runs in both monochrome and colour and the program is split into two parts. The first, *HYPE!* itself, which enables you to construct hypermedia stacks of cards that form the basis of any *HYPE!* document. This is a cut-down PD version however and offers only a limited number of cards for creation. The second part is the viewing program which although PD, is in its full version (meaning that you can create stacks and distribute them knowing that anyone can use them without paying a fee). A registration fee of £19.95 brings the full version of *HYPE!*

There is a down-side. Disk-based, *HYPE!* is slow. The ST's drives are not renowned for their speed of data transfer and the problem is doubly obvious when running programs such as *HYPE!* (although with a Mega ST you can run it from a RAM disk).



***HYPE!* allows links and imports to and from all the most-used ST sources including *Degas*, GEM and so on.**

Mouse responses are often slow and the View program is a little erratic.

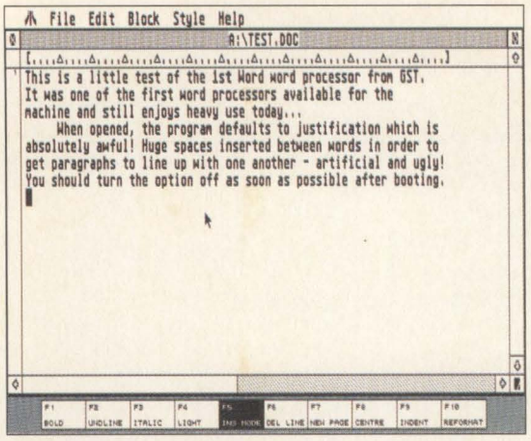
That said, *HYPE!* is a corking bit of dedicated programming and definitely deserves a place in the disk boxes of all those interested in the future.

AMIGA 65%

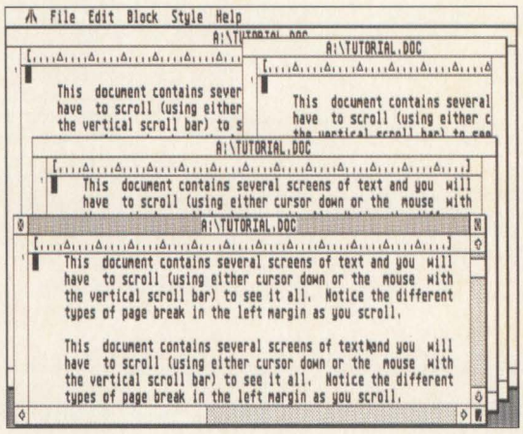
1st Word

ST • Softville Computer Supplies
Unit 5, Stratfield Park,
Elettra Avenue, Waterlooville,
Hants PO7 7PY.
☎ 0705 266509.

The main text preparation problem with the Atari ST is not a paucity of decent software but the machine's crap keyboard. I mean, let's be honest, its QWERTY offering does for touch typing what sticking wet fingers in light sockets do for pacemakers.



***1st Word* is one of the friendliest word processors you'll find. It doesn't have as many features as more modern programs, though.**



The multi-windowing environmentof *1st Word* lets you edit up to four documents simultaneously. You'd better be careful if you have the need for speed, though, as it slows down to a snail's pace.

To push the writer's friend side of the machine and show off its WIMP capabilities, Atari bundled the ST with copies of GST's *1st Word* GEM-based word processor, and that's how many STers got their first taste of the wonders of word processing.

1st Word is designed to be beginner's buddy. The program is equipped with a point'n'click extravaganza of drop-down menus providing simple access to all the features. Unfortunately, *they* could probably be squeezed into a single three-line menu.

Files are displayed in GEM windows with scroll bars, close and zoom boxes. There's a menu bar across the top of the screen and a row of buttons along the bottom providing access to formatting, line deletion and other oft-used functions. To word process, start typing, but not too quickly – *1st Word* drops characters like they're going out of fashion. You have to give the poor thing a chance to catch up.

The program defaults to the kind of text justification not seen outside Oric 1 BASIC applications. Huge wodges of white space bunged hither and thither between the text; it'll do *anything*, just to make sure that those lines stretch out to reach the margins.

All the hum-drum word processor operations are on offer, but there isn't a word counter or a spell checker, you can't edit more than four documents at a time (although that should be enough for most people's needs) and the window drawing and scrolling is stupendously slow. However, the blame for this shouldn't rest entirely on GST's corporate shoulders – GEM's display handling is, let's face it, appaling.

By all means get *1st Word* if you've never used a word processor before and don't know what to expect. Otherwise go for something that actually has something appraoching decent speed and features!

ST 40%

PowerMenu

PC • Brown Bag Software
2155 South Bascom Avenue,
Suite 114, Campbell, CA 95008.
☎ (America) 408 559 4545.

Although replacement front-ends are usually confined to the heavily technical, business and serious users can make just as much use of them if presented correctly, and that's just what *PowerMenu* does.

The program negates the need for DOS, providing in its stead a friendly menu system designed to give you simple access to applications without the need to learn the standard interface (ie MS-DOS).

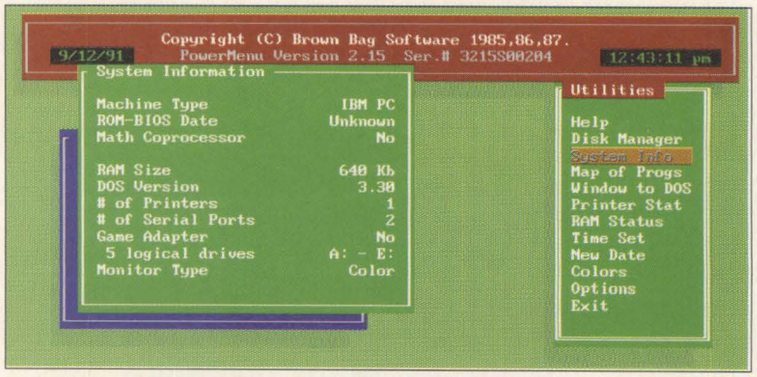
You can set up an AUTOEXEC.BAT file which, after booting, automatically runs the menu (or have someone knowledgeable set up one for you). To use a program installed in the system, all you have to do is select it from the menu by pressing a highlighted key. What that means is that users without any knowledge of the PC can still make full use of the machine. That could be you, your secretary, your boss or children.

And for the chronic techno-phobes among you, help is on-line at all times. Press F1 and a window is displayed which contains all the program's keystrokes together with explanations.

You don't have to quit *PowerMenu* to use DOS either. By pressing F4, you're given an instant window into the operating system. Escape takes you straight back to the menu. Like all Brown Bag shareware, *PowerMenu* is accompanied by an excellent manual.

A useful addition to the machines of those too scared to use them!

PC 90%



Dumbfounded by DOS? *PowerMenu* brings all those complex commands to your disposal via a nice 'n' friendly front end. Who needs Windows when the public domain has programs like this?

...BUSINESS ROUND UP...BUSINESS ROUND UP...BUSINESS ROUND UP...

FastWord 65%
ST ● MT11 ● MT Software
Word processor devoid of cluttered screens and complex operations, it's perfect for the occasional letter.

mCAD 50%
Amiga ● Fish 59 ● George Thompson Associates
Simple CAD program. Easy to learn and fun to use. Runs in interlace mode so there's flicker but *mCAD's* worth a tinker for all that.

Catalist 80%
PC ● DB53 ● Softville
Very useful list manager for manipulating everything from names and addresses, to horses, laundry, coke barons and much more. Comprehensive doc files.

MrBackUp 60%
Amiga ● Fish 129 ● Amiga PD Library
MrBackUp backs makes safe copies without the need for techie know-how. Compression too!

GEM-Calc 70%
ST ● GD1145 ● Goodman Enterprises
One of the few spreadsheets available to colour and mono users alike. There's a comprehensive selection of maths functions.

Filofact 70%
ST ● Softville PD
Filofact stores and manipulates appointments and addresses and provides world time, note pads and much more.

Personal Address Book 90%
ST ● GD625 ● Goodman Enterprises
Converts bits of fag packet with address scribbled on them into a silicon-based address/number filing system that's hard to beat. No more frantic searching for numbers!

Zephyr 90%
PC ● Survey Design Associates
Startlingly powerful shareware relational database similar to *FoxPro* (itself similar to *dBASE*) which supports the standard PCX graphics format.

Diction 70%
ST ● Caledonia PDL
Slightly different from most spell-checkers – there aren't any words! But give it a sample text file and all the unrecognised words are stored. Just right for jargon users.

Badger 60%
Amiga ● Fish 365 ● Softville
Badger stores important dates, reminding you of them automatically. It enables events to sorted by priority too.

SISCPLUS 85%
PC ● BPC14 ● Softville
Shareware accounting manager which handles everything from basic invoicing to stock control and targeting, sales and predictions. Perfect for a small business.

Bank Accountant Manager 65%
ST ● Softville PD
By the author of *Filofact, BAM* does away with the tedium of tracking a bank account. Handles more than a 1000 transactions and up to 20 standing orders with ease.

Opus 75%
ST ● Page 6
Tricky to learn but the results are worth it. Complex spreadsheeting functions, as well as comprehensive docs and example data to get you going. For beginners and advanced alike.

Visicalc 70%
Amiga ● Softville PD
Known and loved for years, the *Visicalc* spreadsheet finally makes it to the Amiga. A full complement of math functions combined with easy navigation make it one of the best.

Sheet 2.0 90%
ST ● ST183 ● Page 6
Sheet is, quite simply, one of the best programmable spreadsheets you'll find for the ST.

Galaxy Lite 80%
PC ● WPC101 ● Softville
RAM-based word processor. Exceptionally efficient revamp of *Galaxy 2*. Handles ultra-large files with ease and scrolls sideways to accommodate the longest lines of text.

QED 85%
Amiga ● TBAG 34 ●17 Bit Software
Very fast text editor-cum-word processor that allows an unlimited amount of files to be open at once subject to system RAM. *FastText* system provides fonts four to 16 pixels wide.

Electronic Bank Statement 60%
ST ● GPR01 ● Public Dominator
Need know what other people are doing with it? Track your stack with this little wonder.

WAMPUM 85%
PC ● LJ Supportware Ltd
One of the biggest selling database packages of all time is *dBASE. WAMPUM* is a shareware rendition of the old pro which is fully-compatible and very powerful. Don't miss it.

BANKN 75%
Amiga ● George Thompson Associates
BANKN is the electronic answer to the teller at the till. Keeps track of cheques, expenses, standing orders and more with ease.

Paperless Accountant 65%
ST ● GD625 ● Goodman
Supports 10 accounts and displays the results on screen.

CalcKey 70%
Amiga ● Fish 235 ● George Thompson Associates
A pop-up fully-featured calculator which you can use from within word proscessors, databases etc – ie just when you need it most!

Contact 70%
Amiga ● George Thompson Associates
Lightly trimmed demo of the personal contacts organiser. Enables you to cut and paste appointments and so on between applications.

Screenwright 85%
PC ● Shareware and Public Domain Library
Unusual word processor which enables those involved in writing for the media to tailor their text to that market. Full support for the distinct screenplay format – easy to use too!

HyperDialer 50%
Amiga ● 17 Bit Software
Straightforward phone dialer. Maintains a database of the numbers you use most. Dials via modem.

Ask-It 65%
PC ● Fantasia Shareware
Superior text-indexing and retrieval program that enables you to store large amounts of text and summon at a keystroke. Useful for students or anyone who needs to locate text quickly.

HomeHelp 50%
Amiga ● Softville PD
List generation with knobs on! Pushed as the electronic grocery list (you're really gonna carry that Amiga around Sainsers, right?), it can be used to create rosters for almost anything.

Cliché Finder 70%
PC ● Shareware and Public Domain Library
If you've got a writing style gleaned from the girlie write-ups in the national dailies, *Cliché Finder* is a must.

Papers 75%
PC ● Shareware-Elite
Database designed to handle complex scientific and mathematical data. Generates standard dBASE files to use in other programs.

Fog Index 70%
PC ● Shareware and Public Domain Library
Back in the 50s, American researchers came with a series of of tests to gauge the readability of the written word. Now you can test your words with *Fog Index*.

The dark side

Are hackers, pirates and virus-writers ruining the public domain? As well as being a place for people to swap useful programs, it's a ready-made medium for all the fringe activities that give computing a bad name. But, argues Rod Lawton, we should not condemn them out of hand...

Although in theory a non-profit-making concept working for the good of all, the public domain also acts as a medium for hackers, crackers, pirates and virus writers. Horror stories about the darker side of public domain have been cropping up in the press with alarming regularity over the past few years:

- December 1989 – A blackmailer distributes an 'AIDS Information disk' containing a potentially destructive virus.
- April 1990 – Thirteen people are arrested for 'phone phreaking' – making phone calls fraudulently charged to other people's accounts.
- December 1990 – US Gold announces that for every game it sells ten are being copied illegally.

Should we just write off the people who do this sort of thing as a bunch of crooks and vandals spoiling the public domain for everyone else, or are they part of a computer revolution?

Sounds a bit far fetched? Maybe. But let's take a closer look at the three main areas of illegal actity associated with the public domain and try to determine the extent of these problems.

Hacking undoubtedly causes harm. But to whom? To the corporations hacked into, of course!

The innocent party?

It could be argued that the public domain does quite enough damage itself without the help of it's 'undesirable elements.' Anyone trying to sell software for a living will deny it in public, of course, but the fact is that every time somebody finds a good PD database/spreadsheet/disk manager, a company producing one of these things professionally has lost a potential sale. These things are relative.

But then these companies are, as a rule, big enough and ugly enough to look after themselves. A successful hack attack usually leaves them embarrassed and outraged rather than in any state of financial ruin.

But hacking is increasingly undermining corporate security everywhere, to the extent that previously 'secret' information is now being made public domain...

So what do the hackers themselves get out of it? A column or two in the national press if they're caught, followed by a substantial wigging or even a jail sentence – there's usually no mention of cash. And if they don't get caught, there's even less glory. Except among the hacking fraternity.

Pirates, on the other hand, are the scourges of the software industry. Many commercial games are 'cracked' and placed in the public domain soon after release – sometimes even before release. The motive's not always profit, but there are certainly professional pirates out there, too. But with cracked software, the public domain is merely the way it's distributed, it's not the cause of the problem.

The official line is that pirates are ruining software companies and pushing software prices up in an out-of-control spiral. But it's a Catch-22 situation – companies claim that piracy erodes their profit margins, forcing them to increase prices. Pirates argue that if they didn't charge so much in the first place then people wouldn't pirate their games.

"Should we just write these people off as vandals and crooks or are they part of a computer revolution?"

Pirates tend to adopt the moral high ground, claiming what they do is for the good of everyone, not just the few selling the gear. We're back to the PD philosophy again, only it's looking a bit more shaky this time...

Viruses are another matter. A virus has no commercial value whatsoever to its author. All a virus can do is spread random destruction wherever it goes, and many of them are, indeed, spread through the public domain. How better to ensure your little beastie thrives and multiplies than to tack it onto some more innocent-looking PD utility?

What is the point of writing viruses? Where does it get you? Most people don't understand the idea of doing anything unless there's cash at the end of it, so viruses will get filed away under 'vandalism', which is a nice blanket term for destructive things people don't really understand.

Warning bells

So there is definitely a link between the bona fide world of public domain with the highly dodgy activities of hackers, pirates and virus-writers. But are

we being too sympathetic towards these 'criminals'? Let's get it in perspective:

- Hacking is highly illegal. It is destructive, costly and a perpetual headache to corporate systems managers. It may also constitute an attempt at fraud. These are not socially pleasant things.
- Piracy is an even more serious offence. It involves the theft of someone else's copyright. Pirates make money that should have gone to the programmers, publishers and distributors. Pirates' moral arguments would carry more weight if they didn't make quite so much cash out of their illegal activities.
- And virus-writing... well, that's got to be just about the worst of the lot. It doesn't just harm big corporations, it harms ordinary individuals who never did the authors any harm. Viruses are at best irresponsible and at worst vandalism.

So it seems that the public domain is the innocent victim rather than the perpetrator. There's a world of difference between the well-meaning world of public domain software and the activities of the fringe members of the computing fraternity. Public domain authors want to distribute helpful code; hackers and virus-writers want to put a spanner in the works, and pirates want to make a quick buck. The philosophies are quite different. Or are they?

Sport for all

Demo-writers regularly turn out code that defies the hardware specifications – and the designers, for that matter. The Atari ST is a good example. Smooth scrolling? No, it can't be done. Except that it *is* done, frequently horizontally and vertically simultaneously. How many colours on-screen at once? No more than 16, it's just not possible – in theory. Except that demo writers are including more like 4,096. That's smart.

But what's the point? Demo writers don't really expect to get 'discovered', to make a million in some fairytale of programmers coming good. Instead, demo-writing is the best example of programming as a *sport*. It's easy to forget that people can do things other than for money.

Because it's there

Computing might have started as a hobby in the early '80s, but now, in many ways, it has turned into a sport. Mountaineers don't climb mountains because there's a crock of gold at the top. Mostly it's just a good view, and a feeling that money can't buy.

Is it the same with hackers? There are plenty of stories about planned fraud, KGB spy networks and abstracted bank accounts, but read between the lines and you soon realise that the majority of hackers who get caught are too naive to really get away with anything like that. Their only skill is computers, their only purpose the sheer challenge.

Demo-writers don't always just write demos. I don't want to suggest that being a demo writer automatically makes you a hacker. Let's kill that one straight away. Let's just say that there won't be many crackers who aren't interested in demos... and the jump from cracking to hacking is so small that it's scarcely a jump at all. There won't be many crackers who don't dabble with hacking, and vice versa.

> *"There won't be many crackers who aren't interested in demos, and the jump from cracking to hacking is scarcely a jump at all."*

Many, many hackers don't get caught red-handed but later, when they start boasting about what they've done amidst the hacking fraternity. The achievement is half the prize, the recognition the other half – not many people climb the north wall of the Eiger without wanting to boast about it to their mates in the pub afterwards.

What about viruses? Sport again. It all started years ago with the concept of 'core wars'. You started with a blank RAM, two programmers and a needle match. The idea was to create a program that could take on and 'kill' the other one. Viruses are a kind of rogue evolutionary offshoot. They've got nothing to fight except a hostile environment – or have they? There are some pretty smart virus-killers out there now, which make for worthy opponents... These activities tie in with ordinary bona fide PD software very simply. Someone sets out to write/do something for its own sake. They achieve it, grin broadly, and promptly give it away. What a wonderful philosophy! Of course, sometimes it treads on a few toes, sometimes it does a lot of damage.

Vandalism? Oh no, it's much more than that.

The future

The public domain is eveolving from a large body of programs either donated to the world by well-meaning authors or too old to keep selling, into an active, growing, diversifying arena. True, there are associated fringe activities which are illegal, possibly immoral and often destructive, but could this represent something healthy too?

People are coming to terms with unemployment and increased leisure time. Money isn't necessarily much of a motive among computer freaks any more – either it's not important or they don't seriously expect to earn anything from their hobby.

What is important to them is the notion of adventure, sport and the idea that data, programs and information should be freely accessible to everyone. Can that be bad...? PD

Pirates ahoy!

This is not going to be one of those patronising pull-outs that any article about piracy has to carry to stop the author getting a wigging from the people upstairs. Instead, let's just consider a few notions...

Pirates are basically burglars with an easy job. They break into someone else's property and then flog off the contents, with the added bonus that they can sell off their ill-gotten gains as many times as they like!

The fact is that software companies *do* lose money out of piracy, it *does* push software prices up in never-ending spiral and piracy *does* put companies out of business (and/or people out of jobs).

And answer this one. When every game has been cracked and put on the pirate network, when the last commercial software house has finally given up and packed it in, who's going to write all those computer games that keep us all going? The pirates? Are they hell!

Chronology of chaos

To put this whole issue in its historical perspective, here's a brief rundown of some of the more infamous news stories that have broken concerning the darker side of public domain:

- OCTOBER 1988 Notorious hacker Edward Singh hacks into British and US defence systems. "The only reason why I'm doing this is because I'm concerned about computer security."
- DECEMBER 1988 Anti-semitic games are being circulated amongst computer users by underground Nazi groups.
- JANUARY 1989 A "doomsday" Friday the 13th virus fails to end civilisation...
- FEBRUARY 1989 Nightmare Software release the *Virus Construction Kit*. Virus guro Alan Solomon released the *Anti-Virus Toolkit* for £49.
- MARCH 1989 Pirates in Scotland circulate a mutated, racist version of Mastertronic's *Sidewinder*.
- MARCH 1989 Insurers Lloyds of London introduces virus damage cover!
- JUNE 1989 Scottish Poll Tax records are damaged by a 'political' virus. Hurrah!
- JUNE 1989 Cream Communications reckons that £950 is, "a small price to pay for data protection and peace of mind". Its Com-Lock module sits between a modem and the phone line, policing communications.
- JUNE 1989 Anti-piracy body FAST starts an aggresssive new ad and information campaign.
- JUNE 1989 A new term is invented – 'Tiger Teams' are teams of hackers employed by the City to tighten up security.
- SEPTEMBER 1989 Home Secretary Douglas Hurd calls on computer users to report bulletin board pornography.
- SEPTEMBER 1989 American hacking expert Donn Parker warns of 'computer terrorist outfits' and 'charters of irresponsibility'.
- AUGUST 1990 The US Army announces plans to develop 'fighting' viruses.
- DECEMBER 1990 FAST siezes £70,000 worth of pirated software in Glasgow's Barrowlands market.
- MAY 1991 A Hong Kong Law Reform committee says that end-user copying of computer programs should be "decriminalised".
- JULY 1991 Dealer Andrew Jayes is sent down after being caught flogging pirated games.
- JULY 1991 The Audit Commission reports that virus attacks are increasing but hacking is in decline.

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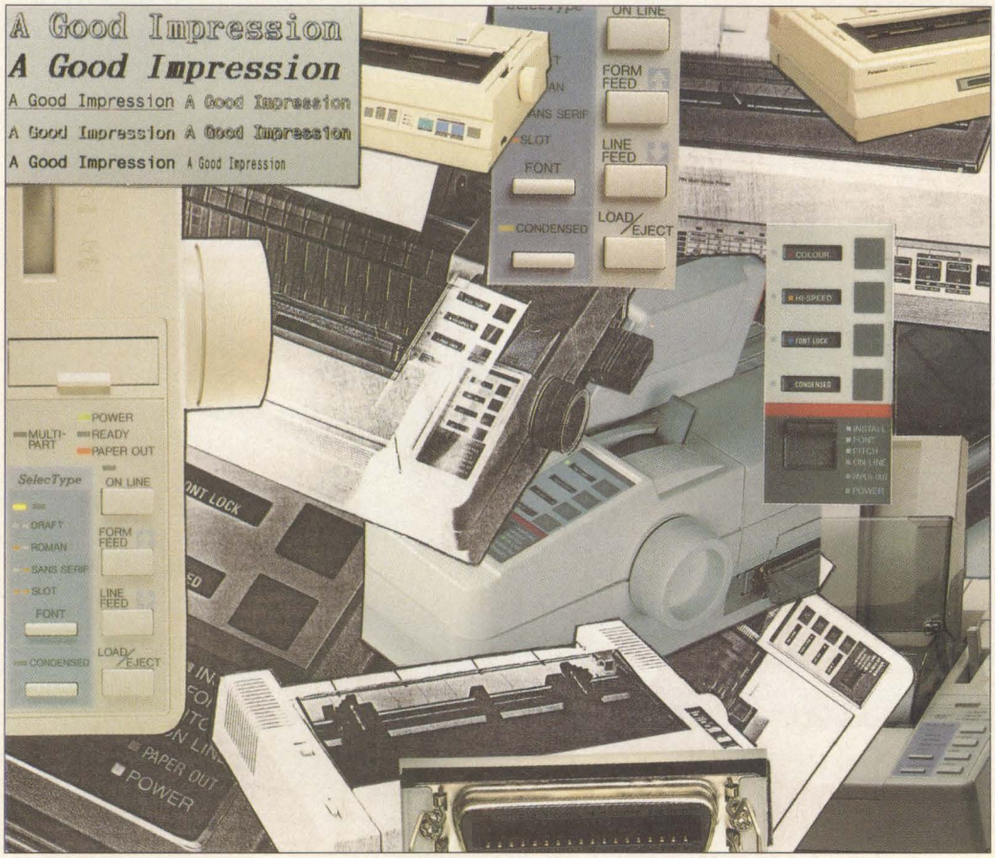
Prints charming

Whether you want to add that professional touch to your correspondence or you're looking to venture into new areas of computing, a printer is the piece of hardware for you. Mark Higham takes a look at twelve of the best.



Does your hand-writing looks as if you had a frontal lobotomy just before the nib hit the paper? Do you want to produce letters which would impress Picasso? Or perhaps you're just a straightforward perfectionist? Then the answer to all you problems is a printer. Check out what's available, buy your own and you'll find a million and one jobs you can do with your printer beyond your original reason for buying it. You'll quickly come to realise why it's one of the most popular purchases for 16-bit owners.

A printer can be the gateway to whole host of new applications: take up desktop publishing to produce your own fanzine; create party invitations; write and test music scores on your micro then hand copies out to your band; print sets of address envelopes to save writing out the same addresses over and over again; create professional-looking reports and documents; produce complex graphs and diagrams. The list of opportunities is endless.

Until very recently if you wanted an affordable printer you really only had two choices – dot matrix or daisywheel. But technological advances have brought the cost of some of the more elaborate printers down within the reach of the masses. You can now pick up a dot matrix printer for little more than £100 – less if you scout round for bargains.

"A printer can be the gateway to a whole host of new applications. The list of opportunities is endless."

Dot matrix printers work by firing a set of pins through an inked ribbon and onto the paper – this is called impact printing. The shape of letters and graphics is made up by firing the pins in a specific pattern. With a 9-pin dot matrix, this dot pattern is clearly visible in the final printout but 24-pin printers have the pins packed so closely together that it's difficult to spot any dots.

Most 9-pins (though not all) come with a Near-Letter Quality (NLQ) option in which the print head makes two passes for each line of graphics. In the

cont. on p78

Get that printer running, driver

The first sign that your micro is having difficulty talking to your printer is when you see reams of rubbish being printed out. Watch out for long lines of question marks or spurious characters plucked at random from the alphabet.

To enable your computer to communicate with your printer you need a printer driver. Most DTP packages, word processors and other professional printer packages come with a whole host of printer drivers. These translate the text and graphics styles used in your documents into something which can be recognised by your printer. For example, to change to bold, italics or different font styles, you need to send special control codes to your printer and this is the job of the driver.

When it comes to producing graphics rather than ordinary text, printer drivers are essential. Although the majority of printers obey the Epson standard control codes for producing text, graphics are a completely different case. Some printers are capable of printing 360 dots per inch while others can only just manage 150. Some print in colour, others have overprinting options for darker output quality – the list of possibilities is exhausting so a driver becomes a must.

With most commercial packages, finding the correct driver is simply a case of selecting which printer you own, clicking on the print option and waiting for the page to come out of the other end. Even if you delve through the classifieds and buy a printer which no-one has ever heard of before, the chances are that it will be either Epson or IBM compatible and since these two formats are the standard, you'll always find printer drivers for them.

However, for tailor-made drivers the public domain is the place to go. PD libraries offer a host of drivers for some of the most obscure printers on the market. The South West Software Library has scores of printer drivers and even offer to be able to write you a driver if you can't find one that does the job.

cont. from p77

second pass, the print head is moved on by half a pin and the line of characters is drawn again. This goes a long way towards eliminating the 'dottiness' which plagues 9-pin print outs.

A similar printing method is used in 24-pin printers, in which case it is referred to as Letter Quality (LQ) mode because the end result is often indistinguishable from a typewriter. Take a look at the example print outs on the following pages to see the effect in action.

Star released the first affordable **colour dot matrix printer** four years ago and they've been cropping up everywhere since. A colour dot matrix printer uses a four-colour ribbon instead of the traditional black ribbon. The cartridge containing the ribbon is then raised or lowered so that the pins fire through the correct colour. By combining or overprinting these four different inks you can achieve a vast range of colours – though don't expect the quality to be good enough to start printing your own £20 notes.

Daisywheels have suffered in recent years because you can't use them to produce graphics – if you want one your best bet is to scout through the classified ads in magazines like *New Computer Express* for a second hand model.

Inkjet printers have, until very recently, been out of reach for all but the Richard Bransons of this world. Now, however, Canon has produced a model which comes in at the £250 mark. Inkjets, as the

MONEY FOR NOTHING

When you buy a printer, always make sure that you scout through the adverts in the computer press for the best possible deal. Most manufacturers tend to quote unbelievable high list prices and there are a very few shops that actually try to flog them at this rate.

The prices quoted we've given in this feature have been taken from adverts rather than the quoted recommended retail price to give you an idea of what you can more realistically expect to pay.

So, you never know. Indulge in a bit of intensive shopping around and you might discover even better deals than the ones we have covered here.

9-pin dot matrix printer

EPSON LX 400

£140 ● Epson UK Ltd ● ☎ 0442 61144

Epson has a reputation for building solid, dependable printers built to last and the LX4000 is no exception.

On the right of the carriage are three membrane switches which dictate various paper options such as line feed, paper feed and on/off line. Combinations of these three switches enable you to select different type styles such as emphasised and condensed print. Unfortunately, you need to have the manual handy to be able to remember them all. There are two NLQ fonts available but these look blocky, particularly when it comes to printing round letters such as 'o'.

It's a fiddly process changing over the tractor unit and you invariably waste a sheet of paper in the process. However, the LX400 is a fast printer capable of printing up to 150cps in draft mode. It loses points for being very noisy and although it claims to be IBM Proprinter compatible, it makes no attempt to print the special Proprinter character set which may be important to you.

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*+,-./0123456789 abcdefghi
+,-./0123456789 abcdefghij
,-./0123456789 abcdefghijk
-./0123456789 abcdefghijkl
./0123456789 abcdefghijklm
/0123456789 abcdefghijklmn
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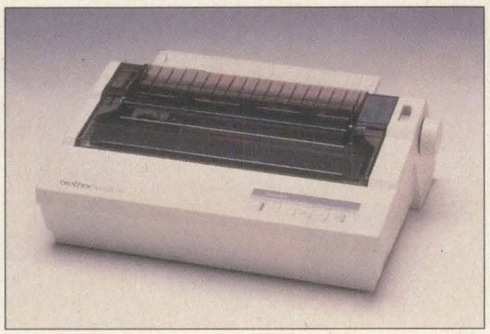
The LX 400 is robust and fast, but has blocky near-letter quality output and noise could be a problem.

EPSOM LX 400 74%

9-pin dot matrix printer

BROTHER M1309

£280 ● Brother ● ☎ 061-330 6531



This is one of the most expensive 9-pins on the market, though you may be able to pick it up cheaper from certain companies. The M1309 is a stylish printer with a wide range of emulations. Six pressure keys at the right of the carriage enable you to select the available fonts and type styles with ease.

The M1309 is the fastest of the 9-pins reviewed. In draft mode is can attain speeds of 180cps and 45cps in NLQ mode.

In its favour, the Brother boasts five internal fonts and it comes with a large 8K internal buffer, which is particularly important when it comes to using desktop publishing packages. Out of all the 9-pins reviewed, the M1309 is the fastest for printing graphics. Unfortunately, although quieter than the Epson LX400, it's still noisier than its other 9-pin counterparts. Despite the increased cost, the print quality from the M1309 is no better than that from the Panasonic so you have to make up your mind whether the extra speed and fonts are worth it.

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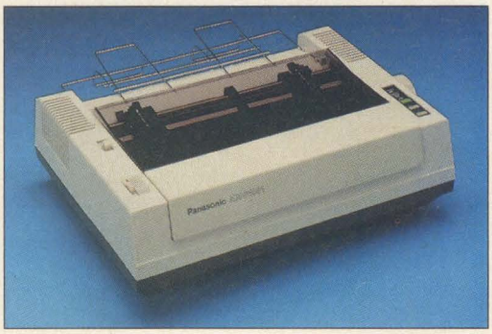
Fast, plenty of fonts and good quality print, the M1309 unfortunately has a price tag to match.

BROTHER M310 71%

9-pin dot matrix printer

PANASONIC KX-P1081

£135 ● Panasonic ● ☎ 0344 853915



In the TV and video department, Panasonic has a reputation for producing reliable equipment but often with a hefty price tag. Its foray into the printer world sees the company maintaining the same high quality hardware but fortunately without the price.

Compared to the other 9-pins, the Panasonic seems deficient in features. Most noticeably it has only two fonts and a very small 1K buffer. It prints at speeds approaching 120cps which is comparable with the Star LC10. It slows down to just 24cps in NLQ mode and is by far the slowest of the printers on test when it comes to graphics. A typical DTP page takes about 16 minutes to print on the other 9-pins while the Panasonic takes a whacking 23 minutes!

The real gem is the exceptionally dark output. A snap-in continuous ribbon gives a solid black output which rivals the print from even the 24-pin dot matrix printers. It's impossible to distinguish the dot pattern which makes up the graphic print out. In NLQ mode the output quality is clearer and less blurred.

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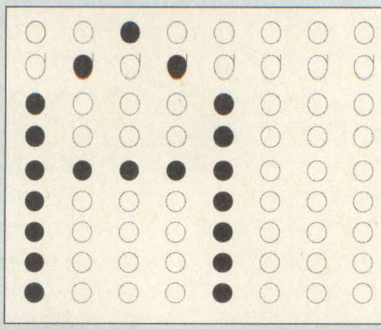
Lacking in features, slow and with a tiny buffer, the KX-P1081 doesn't get off to a good start. But its print quality is superb.

PANASONIC KXP-1081 79%

HOW DOT MATRIX PRINTERS WORK

A 9-pin dot matrix printer has a print head which is 9 pins tall. These pins are fired through an inked ribbon at the paper. The pins are fired in various combinations to produce the letters of the alphabet, numbers and other symbols. After firing one set of nine pins the print head moves forward by the equivalent distance of one pin before firing again.



On the first hit, you can see the first part of the letter A being made. The print head then scrolls forwards slightly and prints another line of dots, this time firing a different sequence.

This process happens so quickly that over one hundred letters of the alphabet can typically be printed in a single second. The exact amount depends on the the output speed of the printer, measured in characters per second (CPS).

name suggests, squirt fine jets of ink at the page to produce graphics. This method enables very dark, crisp print outs. Inkjets have the advantage of being extremely quiet and Canon has actually come up with an affordable portable inkjet.

All printers come with a range of different fonts and type styles. You can embolden your text, italicise it, expand it or shrink it. Some printers even enable you to print text at two or four times the usual size for creating large headlines to your printouts.

A desktop publishing (DTP) package abandons text output and literally 'draws' the page. Although graphic output is slow, it does have the advantage that you can use any font built into your DTP package rather than being restricted to the in-built fonts in your

9-pin dot matrix printer

STAR LC10

£233 ● Star UK ● ☎ 0494 471111

Star is responsible for producing some of the most thoughtfully designed printers on the market, paying attention to those tiny niggling details. For example, the Star LC10 has its port on the side rather than at the back so that it doesn't interfere with the paper feeding. The company has also placed the on/off switch at the front of the printer rather than hiding it out of the way at the back where it's almost always impossible to reach.

The LC10 comes with an extensive control panel which gives you full control of all four NLQ fonts. It comes with a single-sheet feeder and a tractor feed at the rear of the printer. This enables you to use single sheets and continuous paper at the same time. The LC10 is the quietest of the 9-pins and is capable of printing at speeds of 120cps in draft mode.

Even though this isn't the cheapest 9-pin around, its clever paper handling facilities, wide range of fonts and sophisticated text manipulation make it one of the best you can buy.

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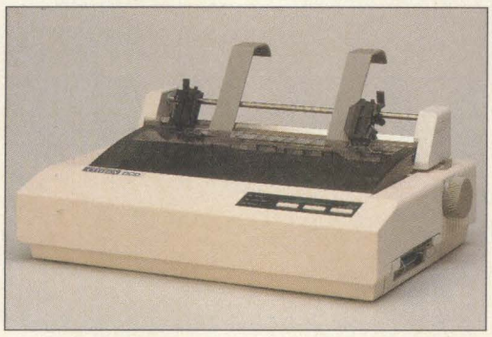
A tad expensive, perhaps, the LC10 is packed with features that make using a printer a joy to use, rather than a nightmare.

STAR LC 10 88%

9-pin dot matrix printer

CITIZEN 120-D

£129 ● Citizen ● ☎ 0895 72621



This is the smallest of the printers on test. It comes with an old-fashioned detachable pull-feed tractor which means you always waste the first sheet of continuous paper. The front panel has three spongy push buttons to control on-line, line feed and form feed. Unfortunately, you can't make any adjustments to the font or typeface from this control panel.

The 120-D compares to the Star in terms of print speed. It's capable of Epson and complete IBM Proprinter emulation. The manual is superb and gives scores of BASIC listings to help you get to grips with control codes and experiment with fonts and text styles. Output quality from the 120-D is reasonable, although in draft mode it tends to look very spidery and you need a new ribbon to see it at its best.

You'll see many ads in the classifieds for the 120-D so expect to pick it up at a very reasonable price. It's a good starter printer, particularly if you're on a low budget, but if you want an array of fonts and features, you won't find them here.

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Not a lot in the way of fonts and features, the 120-D is uncomplicated but can be picked up at a bargain price.

CITIZEN 120-D 71%

24-pin dot matrix printer

BROTHER M1324

£247 ● Brother ● ☎ 061-330 6531

Brother isn't known for smashing any price barriers and its 24-pin printer is no exception. This is the dearest of the 24-pins reviewed here (Brother actually quotes an recomended retail price of £378) but it is a stylish printer with a wide range of features.

At eight fonts, the M1324 offers more than other printer reviewed in these pages. The option to use a plug-in font card extends this still further. Besides the usual text style commands available you can also apply shadow and outline enhancements – though you're unlikely to find much use for them.

Although the Brother is an expensive option, it produces the best graphic output of all the 24-pins. However, this is also the slowest of the printers in the DTP field. To print out a DTP page from *Pagestream* using the ST took an average of 16 minutes for the other 24-pins while the Brother took a sluggish 28 minutes. When it comes to printing in draft mode, though, speeds of 180cps are common, making it the fastest of the group.

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With loads of fonts, bags of features and nifty output, the MP1324 justifies its expense.

BROTHER M1324 82%

cont. on p80

cont. from p79

printer. If you intend to make regular use of desktop publishing then you need to find a printer which offers the best graphic output. Both inkjets and 24-pin dot matrix printers are capable of excellent resolution but an inkjet is also capable of exceptionally dark, crisp graphic print, making it the preferred choice.

Inevitably you have to decide what you want your printer to do before making your choice. Most people kick off with a 9-pin dot matrix. These are good enough for listing out your programs, writing the occasional letter or doing graphic screen dumps but you'll soon find you want an improved quality and a bigger range of fonts. Most desktop publishing packages support 9-pin printers but if it's really professional results you're after then 9-pins just can't deliver the goods. There ia an added problem that the continued passes by the print head over the same area necessary for dark areas in graphics causes wear and tear on the paper.

Until recently, the next obvious step has always been to progress onto a 24-pin dot matrix printer but with inkjet printers there are some very serious and affordable alternatives to this printing process. Even the option of colour has now become available to people with a low-budget.

Whatever your choice, there's no doubt that a printer is going to make your life easier. Reviewed here are 12 of the best value-for-money printers on the market – cast your eye over them and make up your mind what you need. PD

Make the connection

With a couple of exceptions, all printers either attach to your computer through the serial or parallel port. All of the printers reviewed here come with a parallel port connector as standard but some have an additional serial port. The serial port is usually used by modems. If you find you need to use the serial port then you need to make certain that you set your computer up to operate at the correct baud rate (the speed at which information is transferred between your computer and the printer).

None of the printers on test come with a printer lead as standard so you may have to go out and buy your own. If you're lucky your dealer will throw one in with the printer, otherwise you can expect to pay up to £25 for the lead.

24-pin dot matrix printer

PANASONIC KX-P1123

£185 ● Panasonic ● ☎ 0344 853915

Of all the 24-pins reviewed, this is the best of the bunch, combining exceptional features with good quality output and an attractive price tag.

This is a solid printer with a control panel running parallel to the carriage. Using a set of four pressure sensitive buttons and a matrix of little lights you can pick every one of the five fonts available and select different type styles and character pitches.

The tractor feed unit is contained inside the printer so there are no fiddly bits and pieces to worry about when you come to set it up.

This is the quietest of the 24-pins on test. It also comes with a 10K buffer making it one of the fastest printers in this category. The Panasonic can achieve speeds of 150cps in draft mode but slows down to just 53cps in letter quality mode.

This is certainly a printer with which to impress your friends. Not only is it cheap but it also comes with an attractive line up of features and has very good quality output as well.

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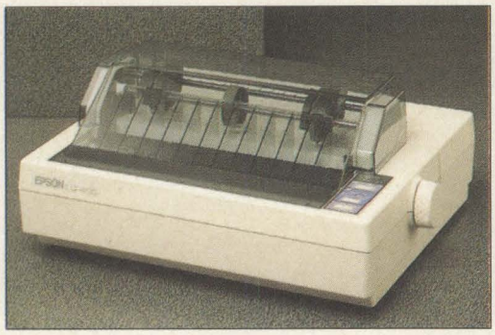
Quiet and fast with good quality output, the KX-P1123 outshines its more expensive competitors.

PANASONIC KX-P1123 90%

24-pin dot matrix printer

EPSON LQ400

£203 ● Epson UK Ltd ● ☎ 0442 61144



This 24-pin printer is similar in design to the LX400, its 9-pin equivalent. This is one of the cheapest 24-pins you can lay your hands on, yet to make up for this price reduction Epson has skimped on features.

The most annoying aspect of the LQ400 is its pull feed tractor unit. After Star established a new standard for paper handling with its push feed units, you'd expect the major players to follow suit. It's a pity Epson have largely ignored paper feeding.

In the speed department, the Epson can print at a rate of 150cps but it's exceptionally noisy. Three internal fonts and an 8K buffer complete the story.

What matters most with any printer is the final output and here the Epson performs extremely well. Of all the 24-pins reviewed here, the LQ400 produced the darkest, cleanest output.

However, with just three fonts on offer and an annoying paper feeding arrangement, you have to make up your mind whether more features are important to you.

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Clean, crisp output is offered by the LQ400. It's noisy, though, and misses out on some features.

EPSOM LQ 100 83%

24-pin dot matrix printer

STAR LC24

£233 ● Star UK ● ☎ 0494 471111

Like all Star printers, the LC24 is simple to use. It boasts exceptional paper handling features and even the paper bail lever is automatically controlled. When it's time to feed the paper, the bail lever flicks forward, one page is scrolled out of the way and a new page is lined up with the print head.

There are four fonts available and these can be selected from the five pressure sensitive keys to the right of the carriage. A series of lights keep you informed of what font, type style and pitch is currently selected. There's even an option to ignore all style setting commands used in a print out – useful if you're trying to track down a problem.

In addition to the usual type style effects, you can use shadow or outline mode and double or quadruple character size for those chunky headlines.

The print quality from the Star isn't exceptional but if you're looking for features then the LC24 has them all. It's a fast, dependable machine which is going to last you for years.

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Well designed and offering a myriad of features, the LC24 is an excellent choice. Print quality is good, not great, though.

STAR LC 24 87%

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Buffer
A printer can come with anything from a 1K to a 1Mb internal buffer. Text and graphics are sent from your computer at speeds higher than the actual printing speed. The buffer stores these codes and prints out the information, freeing your computer for other uses. Buffers are important when printing graphics because such massive amounts of information must be sent to the printer.

CPS
Characters per second. This is the standard by which the speed of printers is measured.

Draft
This is the fastest method of printing available. Text is constructed of tiny dots but unlike NLQ or LQ mode, the spaces between the dots aren't filled in, saving considerable time. Draft mode is ideal for printing out listings or other lengthy documents where the print quality isn't important.

Form feed
This is a button on the front on the printer and enables you to scroll up to the start of the next page so that the paper is ready for printing.

Line feed
Scrolling up the page one line at a time.

NLQ
This stands for Near-Letter Quality and applies to dot matrix printers only. This mode enables you to print text which looks more like the output from a typewriter. Printing is much slower in this mode because more dots need to be laid down to make the text appear smooth. In 24-pin printers, the term LQ is used because the output is claimed to be proper letter quality.

Tractor feed
Essential if you want to use continuous paper. The paper needs to have sprockets down both sides of the paper and these are guided through the printer by the tractor unit. A pull-feed tractor unit pulls the paper through the printer but this approach means you always waste the first sheet. New push-feed tractors are now available on some printers which resolve this problem.

Inkjet printer

CANON BUBBLEJET BJ 10e

£270 ● Canon UK ● ☎ 081-773 3173

This inkjet printer is not only the cheapest of its type on the market, it's also one of the most exciting. Unlike any other printer reviewed here, the Bubblejet is completely portable. Canon has kept it very small, and, as a result, it looks nothing like a printer. It also sounds nothing like a printer, being so quiet you need to hold your ear to hear it going.

The Bubblejet comes with two in-built fonts and a 37K buffer. If you intend to use it to produce graphic dumps then check that you can get an appropriate printer driver. Inkjets don't obey the Epson standard and drivers have yet to appear for some micros.

There's no such thing as draft mode on an inkjet so if you're after super-fast printing you won't find it here. However, for letter-quality output the Bubblejet operates at 83cps, far faster than any of the dot matrix printers. Output quality is exceptionally dark and clear. If you need a printer that can produce the type of output which is going to rival top-of-the range typewriters then this is it!

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Advanced printing technology at an afforable price! The BJ 10e is quiet, fast, offers excellecnt output and looks good to boot.

CANON BUBBLEJET BJ 10e 92%

Colour printer

STAR LC200

£304 ● Star UK ● ☎ 0494 471111

This is one of the latest additions to the Star range of printers and replaces the LC10C. It's a 9-pin colour printer, though you can buy a chunky black ribbon if you don't intend to make use of the colour option.

The LC200 has five internal fonts – one more than the LC10 – and a very hefty 16K buffer. It's fairly noisy but comes with a 'QUIET' option which is supposed to reduce the volume level, but we found no noticeable loss of noise. Despite claiming to run at 220cps, the best the LC200 can really manage is 150cps in draft mode, making it slightly slower than the Citizen Swift 9. However, its colour output is better than the Citizen's.

Being a 9-pin printer, it's text output quality is not especially brilliant. The text is too light and spidery compared to other 9-pins but if you're desperate to produce colour at an affordable price then this is the one to opt for. As with any colour printer, make sure you can find an appropriate printer driver and ensure that the packages you use support colour output.

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Though the LC200 is one of the best of the colour printers on the market, it's text output isn't all that hot.

STAR LC200 79%

Colour printer

CITIZEN SWIFT 9

£280 ● Citizen ● ☎ 0895 72627

To make the Swift 9 print in colour you need to obtain an additional plug-in upgrade board. This usually retails for approximately £35, though some dealers are now bundling it free with the printer.

The Swift 9 might not look particularly pleasing but it comes with some very good features. A control panel enables you to call up any of four menus, each offering access to 16 functions. These give you the opportunity to change font, pitch size, paper loading and a myriad of other useful features.

Three different paper feeding options are available on the Citizen. You can either use a push tractor to save wasting a sheet of continuous paper or a pull feed tractor if you're using heavy-weight paper. A bottom feed is also available, though you need a special stand to make use of it.

Four fonts and an 8K buffer complete the feature list. Text output is comparable to the Star LC200 but the colour output is less impressive. With other printer drivers it may be possible to obtain a crisper output.

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9:;<=>?@ABCDEFGHIJKLMNOPQR
:;<=>?@ABCDEFGHIJKLMNOPQRS
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<=>?@ABCDEFGHIJKLMNOPQRSTU
=>?@ABCDEFGHIJKLMNOPQRSTUV
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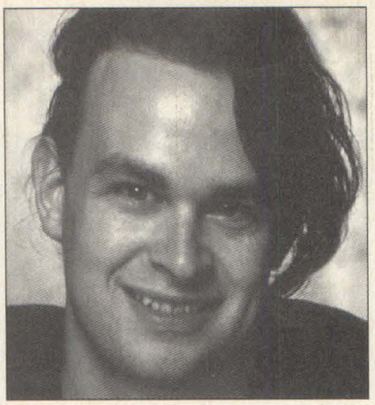
The Swift 9 doesn't do badly in terms of features, but suffers from disapointing colour output.

CITIZEN SWIFT 9 72%

Demos



Sick of looking at the same old games? Want to stretch your machine to its limits? Then check out some PD demos. Maff Evans checks out the current scene.

Demos are unique to the public domain. No one would pay commercial prices for them and they are essentially pointless. But they are often brilliant fun and push your computer to the extreme of its capabilities like no other software. Whether you want some flashy graphics to impress your friends, or you just want something humourous to entertain you, have a browse through the libraries and grab a demo disk or two.

Demos range from simple, scrolling messages with pretty-patterned backgrounds to classily produced mini-cartoons. You're bound to find something which is just your cup of tea.

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Scanners Animations

Amiga • 1003 • 17 Bit Software
PO Box 97,
Wakefield WF1 1XX

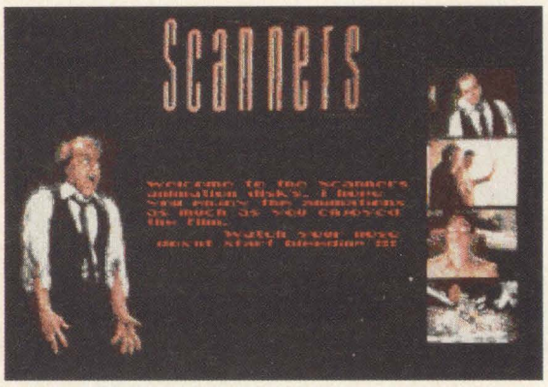
This disk is most certainly not for the faint hearted! For those of you not familiar with David Cronenberg's brand of horror, I suppose we'd better tell you what *Scanners* is all about.

In theory, every person has the ability to control objects by using the power of the mind. There are certain people, called Scanners, who take this power and use it to maim and kill. Very nasty.

This two-disk collection features two of the most gruesome scenes from the film. The first shows a pair of eyes and... NO! We can't tell you what happens. Oooh, it's too horrible!

The animations are a little on the short side, consisting of loops of not more than a few seconds. Still, when it's this gory, how much can you stand? You're sick! The lot of you!

AMIGA 51%

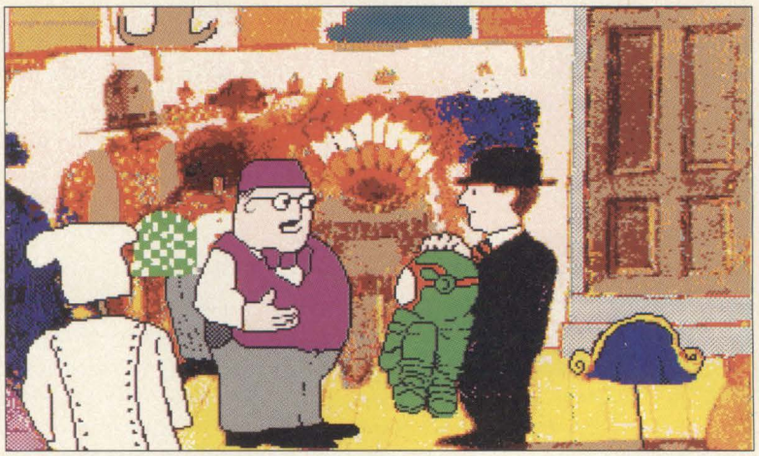


The *Scanners* collection – and I bet you can guess which bits they've collected together. Yep, all the goriest ones.

Mr Benn Demo

ST • Caledonia PDL
250 Oldtown Road, Hilton,
Inverness IV2 4PT.

Ah! This takes me back to when I was a nipper! Ray Brooks' voice intoning another gripping adventure while the cardboard cutout animations strut their stuff. Where is *Mr Benn* now? Why doesn't the BBC make a new series? Release the videos! We want *Mr Benn* T-shirts and boxer shorts! I'd be there at the front of the queue, I can tell you!



As if by magic, a *Mr Benn* demo appeared. *Mr Benn* talks to the shopkeeper at the costumier. Could this be a cue for another exciting adventure, or will it just endlessly loop around?

The demo is pretty simple – the music to the *Mr Benn* TV program plays while various digitised frames are displayed. Unfortunately, the shots are only of the costume shop and Festive Road. It would have been quite nice to have had a few clips from one of Mr Benn's adventures.

Also included on the disk is a *Rocky and Bullwinkle* demo, featuring clips of the madcap duo along with some sampled audio. All you mad American-cartoon fans should love it!

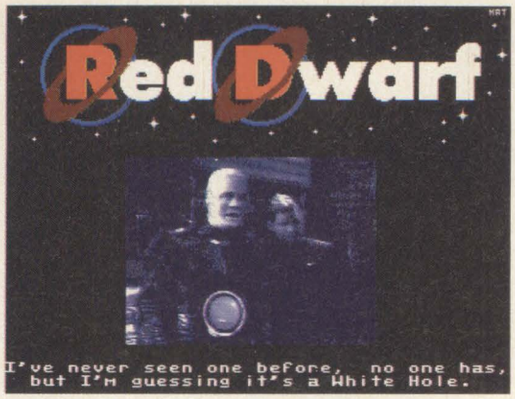
ST 80%

Red Dwarf Demo

Amiga • 576 and 577
Capricorn Computers, 35 Warwick Road, Olton, Solihull, West Midlands, B92 7HS

Over the past few years *Red Dwarf* has managed to evolve, somewhat unexpectedly, into a cult TV program. There are books, mugs and T-Shirts emblazoned with quotes from Rimmer, Lister, Kryten, et al, to be seen everywhere, and now one-meg Amiga owners can have (cue fanfare) the *Red Dwarf* PD demo!

Starting off with the *Red Dwarf*



Have some fun, fun, fun in the sun, sun, sun, or alternatively stay in and watch some cult SF comedy on this *Red Dwarf* demo.

theme backing a few credits, a press of the mouse button starts the demo proper. The scene is the episode in which a white hole is spewing time out into the universe, causing all manner of strange things to happen aboard the Red Dwarf mining ship.

The scene is depicted by way of a series of digitised frames played in sequence along with sampled speech from the episode. The demo appears to loop not long into the script, but don't be fooled – the white hole causes some strange time effects!

The clip is a little short, especially considering that it's a two-disk offering, but the speech is clear and the pictures have been digitised pretty well, so *Red Dwarf* fans should seriously check it out.

AMIGA 81%

The Run

Amiga • D510 • NBS
132 Gunville Road
Newport
Isle Of Wight PO30 5LH

When it comes to ray tracing and 3D animations, one man seems to have mastered the art of the third dimension. The chap in question is Tobias Richter.

Tobias Richter brings us yet another impressive 3D creation to add to his portfolio with *The Run*.

In this, his latest demo, he takes a break from his usual outer-space scenes and comes a little more down to earth. The animation shows a high-powered, souped-up police car zooming after a lowdown criminal attempting an escape in a red Lotus. The pair zoom down the highway nipping in and out of the traffic.

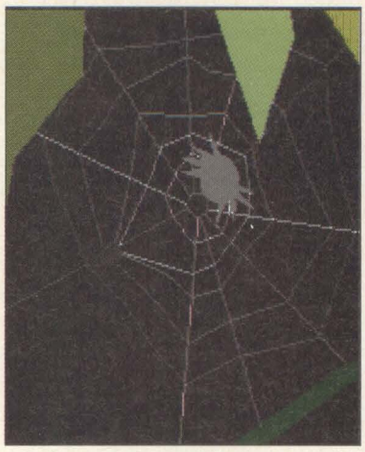
The 3D is superb, being highly detailed yet still running swiftly and smoothly. If you're looking for just one program to demonstrate the graphical power of your computer, then you need look no further than this!

AMIGA 89%

The Run

ST • Dem 238 • MPH
10 Chandlers Court, Eaton,
Norwich, Norfolk

Tobias is a dab hand with the ST as well as the Amiga on which he



***Franklin the Movie* – a bit of a pretentious title for a fun, strange, but still short demo.**

produces most of his work, and has produced his famous car chase demo for Atari's baby too.

The animation is every bit as good on this machine as it is on the Amiga. The only real problem with the ST version is that it takes a little bit of fiddling around to get the program started, whereas the Amiga disk is a simple 'boot up and go' job. This doesn't let the demo down too much though, since 3D animation of this incredibly high quality really deserves to be seen.

ST 84%

Franklin the Movie

Amiga •New Wave Software
PO Box 199,
Manchester M1 1JE

The nice thing about PD demos is that you can collect a whole host of strange animations at a cost of next to nothing, and *Franklin the Movie* is about as strange as they come!

Franklin is a little fly who lives in the meadow (it's starting to sound like *Jackanory*, isn't it?). One day he decides to go for a fly into town to see what he can find. After narrowly escaping death from a dirty great spider, he goes on to meet the Queen and is taken for a meal in a fancy restaurant. Not too bad a day for an insect, eh?

The animation is a strange combination of polygon-shapes and cut-outs, but the overall effect is very colourful and highly entertaining.

A fair bit of patience is needed when attempting to load the disk, as it has to be accessed from the Workbench. Single drive users should prepare themselves for a hefty bout of disk-swapping!

AMIGA 82%

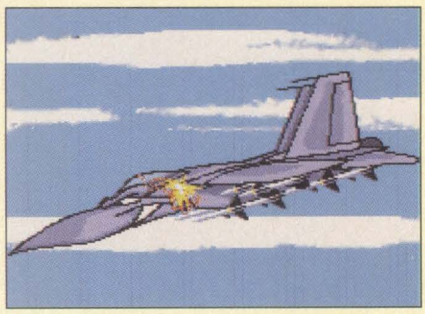
cont. on p84

Anti Lemmin' Demo

Amiga • 17 Bit Software,
PO Box 97, Wakefield,
WF1 1XX

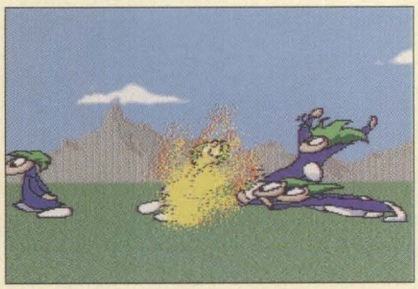
If you're into cartoons then there is one name you'll have to remember when hunting out PD demo disks. Eric Schwartz is the man responsible for producing some of the best computer cartoon animations ever seen. His range of Aerotoons is growing all the time, and features some absolutely superb work. These clips consist of humourously-drawn aircraft in all manner of tricky situations.

However, aeroplanes and helicopters aren't the only subjects that Eric covers. He's also created animations based on cuddly cartoon creatures such as Amy the Squirrel, Miss Mam'selle and a new froggy hero (who can be seen in the *Dating Game* demo).



The lemmings have even more to contend with in this fictitious level – a MiG fighter, armed and dangerous...

In his latest masterpiece, *The Anti Lemmin' Demo*, Eric has surpassed himself. The cartoon features the sexy Miss Leona Lemming, as she plays her favourite Amiga puzzle game (no guesses for working out what it is). However, she has a problem, she can't finish the 'Aerotoon Apocalypse' level! This isn't surprising because the job of getting the Lemmings to safety is complicated by a heavily armed jet trying to take out the little green-haired chaps. One Lemming tries to fight back by donning a Rambo-style headband and blasting the jet with a rocket launcher.



...aiieee! The lemmings try to run for their lives as the missiles blow their guts out!

However, this only infuriates the attacker, causing him to wipe out the entire Lemming herd, much to Leona's annoyance.

If you're unfamiliar with Eric's animation style, then be prepared for some of the cutest, most colourful and amusing cartoons you'll see in any demo. One point to remember is that Eric's animations tend to be hefty on the old memory usage, so check that your system is able to cope with the cartoons. If you haven't enough memory, then get some more just to see the clips – they're worth it!

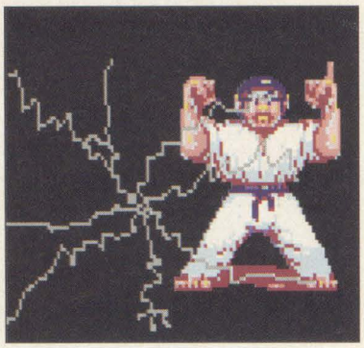
AMIGA 93%

cont. from p83

Things Not To Do

ST • Riverdene PDL
30a School Road, Tilehurst, Reading RG3 5AN

It's nice to see someone injecting humour into computer animations! There must be quite a few of you who



Now that's not the way to treat property. Just one of many *Things Not To Do*.

get fed up when you see coders coming up with yet another sinewave pattern with vectorballs and a scrolltext and getting all po-faced about their prowess as programmers. Don't take it so seriously chaps!

This demo features some strange little clips of karate fighters getting into all sorts of scrapes. Occasionally the humour is a little crude, and there could be a little less bad language. Still, it's a fairly amusing set of clips, so it's worth a look.

ST 78%

Mars Flight

Amiga • 1092 •
17 Bit Software, PO Box 97, Wakefield WF1 1XX

One nice thing about home computers with graphical capabilities as good as those of the Amiga is that you can create the feeling of whole worlds inside the machine. In this case the world that has been created is Mars as it may look in the future.

The clip starts off with a cruiser approaching the spaceport over a couple of rotating radar towers. The cruiser then flies through the city to its docking site.

The demo runs well enough on standard machines, but users with a couple of megs to spare will get the full effect. Users with low memory will only be able to see the first section of the animation to play, whereas those of you with porky expansions will see the ship flying between the skyscrapers of Marsport, while hovercars and other traffic pass below.

3D animations of this quality are few and far between, and when you consider the effort that must have gone into *Mars Flight*, it's not hard to understand why! Save up for that memory upgrade and have a taste of the future!

AMIGA 90%

***Mars Flight* – you'll need a full meg of memory on your Amiga to get the most from this very impressive demo.**

Predator III Demo

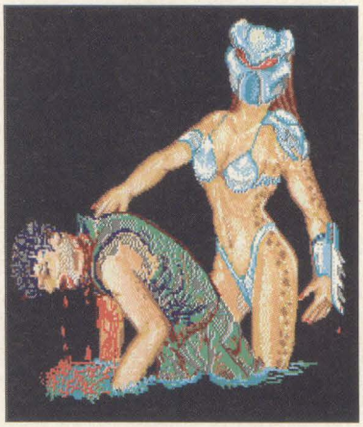
ST • 27 Stainton Drive, Felling Gateshead NE10 9QT

So what would you expect from a demo titled *Predator III*? The nasty alien invader himself on yet another rampage? A reworking of the *Predator* game graphics? If this *is* what you thought, then you'd be wrong.

This disk contains a simple animation featuring a rather strange twist on the original *Predator*. The fact is, that this Predator is a sexy female (gasp). However, she's still as nasty as the original!

The graphics are bright and colourful, but the clip is a little short and there is no sound to back it up. Still, it's worth a look for a laugh if nothing else!

ST 63%



Who is that sexy girlie? On second thoughts, by the look of that poor bloke she's with, it may be a good idea to steer clear of her!

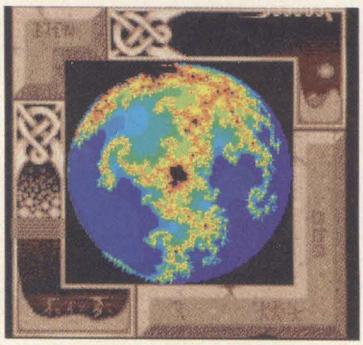
Alfa Omega

Amiga • 1206 • 17 Bit Software PO Box 97, Wakefield WF1 1XX

Instead of simply displaying loads of fractal pictures in succession, the team behind this demo, the Pure Metal Coders, has taken the theme of fractals and developed a rather innovative demo around the theory behind them.

It starts off with the ubiquitous vector routines; a maze-like journey through the PMC logo, a ball inside a frame and, of course, a cube. The demo then continues with a series of ray-traced balls spinning over a Julia curve. Sound weird? Don't worry, it gets weirder!

To end the demo, a strange fractal effect is used while the credits appear. The idea of fractals is that when you zoom in to any area of a Mandelbrot



***Alfa Omega* – your chance to see how weird a lot of ray-traced balls can really get.**

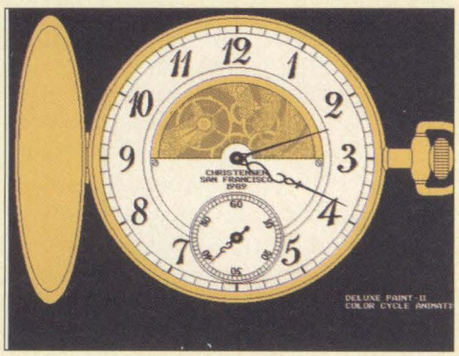
Colour Cycling Animations

Amiga • 1173 •
17 Bit Software, PO Box 97, Wakefield WF1 1XX

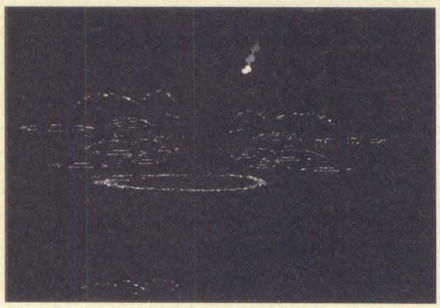
Even though most animation demos are rendered with all manner of complex programs (*Sculpt 4D, DPaint III, Movie Setter* and what have you), this demo shows just what is possible even with the simplest of animation systems. All the pictures were created in *Deluxe Paint II*, which, unlike its descendants, doesn't have any special animation facilities. Instead, all the movement has been created by careful use of colour – each section of the animation was positioned on screen in a different shade. The colour cycling option is then used to give the impression of motion, when all that is actually happening is that the on-screen colours are changing rapidly!

Even though this type of animation is simple, the overall effect is incredible. It just goes to show that you don't need a load of fancy gadgetry to come up with interesting demos!

AMIGA 80%



You don't need complicated languages to create impressive demos. This watch was animated using *DeluxePaint*.



The animation on this collection was achieved using only colour cycling, and the results are very impressive.

set, you eventually see the same pattern. PMC has taken this idea and used it on its logo. The screen zooms in on the letters PMC until it becomes apparent that each dot of the logo is made up of smaller logos. It then zooms in on the dots of these logos to reveal yet more logos, and so on ad infinitum. Extremely strange!

AMIGA 86%

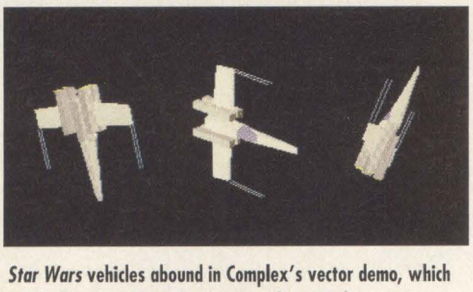
Intros Compilation 61

Amiga • 1180 • 17 Bit Software PO Box 97, Wakefield WF1 1XX

This compilation disk is basically a collection of various vector demos from a number of coders, including Anarchy, Cave, Chrome, Complex, LSD, Northstar, Prologic and the legendary Rebels.

Most of the demos are pretty standard fare, with a *Tracker* tune playing over a series of mutating cubes and whizzing vectorballs, but the techniques are pretty impressive.

The Anarchy intro contains various filled 3D shapes in five bitplanes, allowing 32 colours to be used. The Cave demo features a strange whizzing logo with a 'ghosting' effect on the movement while a stirring version of the *Switchblade II* music plays in the background.



***Star Wars* vehicles abound in Complex's vector demo, which can be found on 17 Bit's *61st Compilation Disk*.**

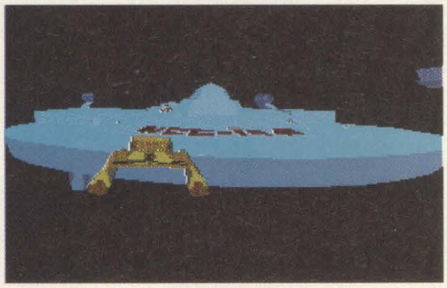
But the most interesting demo of the lot is the Complex intro. This features ships and vehicles from the *Star Wars* films, such as X-Wing fighters, TIE fighters and AT-ATs zooming and rotating across the screen as a dramatic, film-score type tune plays (just soak up those powerful chords).

The only really dodgy demo in the collection is actually the Rebels' entry. This simply contains a Baal picture (good as it is) and some pretty dull plasma effects. You'd expect better of the people that brought us the great *COMA* demo! Still, the rest of the disk is pretty good and well worth vector enthusiasts adding to their collection.

AMIGA 80%

Star Trek Animation

Amiga • D549 • NBS 132 Gunville Road, Newport Isle Of Wight PO30 5LH



Tobias Richter s hardly going boldy into new areas with his new *Star Trek* demo, but who cares? It's superb.

Tobias Richter returns with yet another 3D animation. This time he's back to the subject he loves the most – *Star Trek*. Many of his clips feature all manner of Federation, Klingon and Romulan ships 'boldly going' across the screen, and this is no exception.

The demo is a simple loop, featuring shuttle craft and Federation starships drifting through space. As you'd expect from the man Richter, the graphics are well defined and smoothly animated. A great demo!

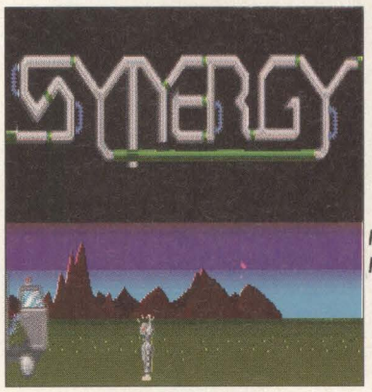
AMIGA 84%

Simple Stuff 4

Amiga • D244 • NBS 132 Gunville Road, Newport, Isle Of Wight PO30 5LH

From a title like *Simple Stuff* you know pretty much what to expect! This disk contains three basic demos. The *Cardamon* demo by Frantic is (surprise, surprise) a vector demo, while Pussy has put together an intro featuring that old workhorse, the whizzing blitter objects animation.

Cybernut is fairly amusing, featuring a rather stupid robot (the author's words, not mine) strolling along a landscape. Along the way he comes across puddles and a shark pool before falling foul to a truck!



***Simple stuff* is full of just that – three all rightish but fairly humdrum demos.**

Not much to rave over on this disk, since they're all simple (as the title suggests). Still, if you want to add a few more intros to your collection, then here are three more!

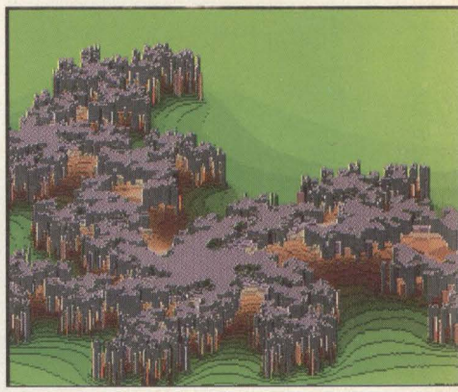
AMIGA 41%

Cebit '91 Party Pack

Amiga • 963 • New Wave Software, PO Box 199, Manchester M1 1JE

Another collection of short demos, this time from artists such as Addonic, Trygon, Trackers, Paranoid, Extensions and Coma.

The Trygon, Paranoid and Extensions intros are simple scrollers with a few bobs thrown in. Pretty crap stuff really. Trackers has gone for a plasma demo, without making anything exciting.



***Fractale* is probably the most interesting demo on the *Cebit '91 Party Pack* collection, but then it doesn't have much competition.**

The only one worth looking at is

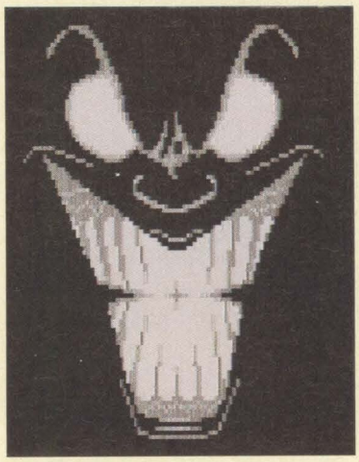
cont. on p86

Pixeled Pleasures

Amiga • 1173 • 478 • SWD PD 27 Axwell Terrace, Swalwell, Newcastle-upon-Tyne

This demo starts up with a logo of the coders, Them, accompanied by a strangely groovy soundtrack. It reminds me of something, but I can't quite place it...

The rest of the disk is a collection of various intro styles, from rotating vector shapes, floating bobs and strange scrollers. Some of the effects are pretty impressive (if a little odd) such as the 45-degree scrolling horizon, complete with a rotated font!



This friendly looking character looks pleased enough with *Pixeled Pleasures*.

Speaking of fonts, that's one of the annoying things about this demo – a lot of the text fonts are so strange and wibbly that they are virtually unreadable! This lets the disk down quite badly, since one of the most prominent effects is the scroller!

One other interesting thing that the disk contains is a reworking of the *Turrican* theme tune. Can't be bad.

So, if sampled music is up your street, this demo is worth a listen. Everyone else is advised to consult an optician before attempting to read anything the message has to say.

And by the way, if you can work out what the inspiration was for the intro music, bully for you!

AMIGA 67%

cont. from p85

Addonic's *Fractale* demo, which features a strange method of displaying Julia curves and other fractal sets in 3D. It's a little slow, but the final effect is worth waiting for.

Oh, by the way, the Coma demo is called *Boring Bobs* and it is!

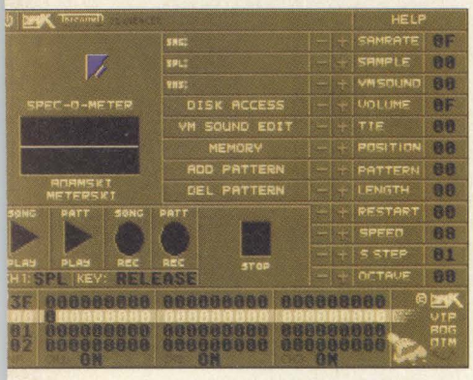
AMIGA 58%

A Little Music Demo

ST • Riverdene PDL
30a School Road, Tilehurst, Reading, Berkshire RG3 5AN.
☎ 0734 452416

The Inner Circle demo group takes some time out from producing snazzy graphics-based demos, to produce this excellent collection of *Soundtracker* tunes. There aren't any graphics at all in this demo, merely a song-choosing screen, enabling you to listen to the eight songs. Inner Circle has hit on a novel idea here; it has actually created decent music. The vast majority of tracker music is merely an exercise in squeezing as many samples into as fast a tune as possible. These chaps have paid a great deal of attention to melody, making their tunes the cream of *Tracker* songs.

The styles covered by the eight songs include a piano ballad, two Euro-beat songs, a couple of progressive rock tracks and a bit of thrash-acid music. Best of the crop is the moody tune *Flying High*, which smacks of late Pink Floyd and includes some excellent sweeping bass samples. Well worth checking out.



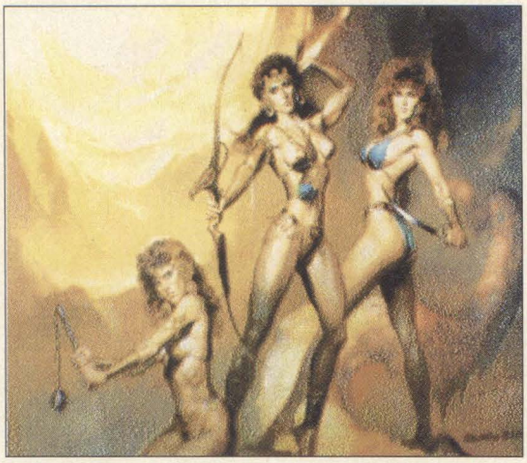
Great tunes make *A Little Demo Music* stand out from the usual *Tracker*-based fare.

ST 92%

Fraxion Slideshow

Amiga • 734 • SWD PD
27 Axwell Terrace, Swalwell, Newcastle-upon-Tyne NE16 3JS

I have this theory: people only buy science fiction and fantasy stories for the funky illustrations on the cover.



***Fraxion Slideshow* – full of science fiction clichés such as scantily-clad women and mythical beasts, but done with a bit of style.**

One of the finest exponents of the art of fantasy graphics is a chap by the of name of Boris Valejo. He has a very distinctive style that you're bound to recognise.

The *Fraxion Slideshow* is a series of these Valejo pictures, digitised for bedroom consumption. The themes of the pictures are all fairly similar: various mythical creatures interact with scantily-clad and very well-endowed women. The digitising is of a high quality, but the music is the wrong side of dubious. Check out this slideshow if you're a dyed-in-the-wool Valejo fan, but keep the volume turned well down.

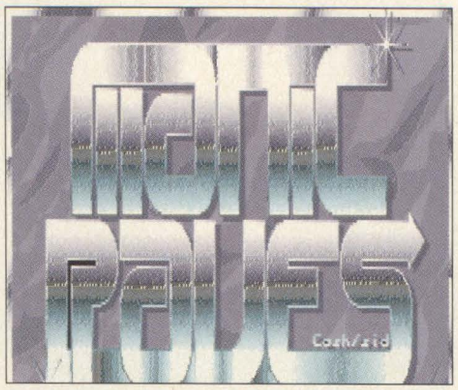
AMIGA 74%

Manic Raves

Amiga • 1229 •
17 Bit Software
PO Box 97, Wakefield WF1 1XX

Blimmin 'eck, here's a real belter of a demo disk if ever there was. There are eight songs on the two disks, each of them compiled from some superb samples. The author has created some pretty unique results by lifting the best bits from other people's songs and sequencing them together.

Instead of going for the standard bar chart noise display , a large blue cube floats above a checkerboard, spinning in time to the music. Each side of the cube responds to a different sound channel or frequency, so it pulses as the tune plays. Musically, this demo is light-years ahead of the crop. If you really fancy bruising the speakers on your 8833 monitor then these rich, original samples will do just the job.



***Manic Raves*: Here's a turn-up for the books. A music-based demo that has actually had some effort put into its graphics.**

The music's so impressive that if it came out on 12-inch record, I'd be straight down to the shops to blag myself a copy. Perhaps they should get Amigas installed at rave parties instead of turntables if writers continue to turn out demos of this standard.

Everything from N-JOI to Public Enemy has been sequenced together. However, rather than attempting to squeeze as many samples as possible into each song, the composer lets each tune build to a terrific climax by slowly layering sample on sample.

Best of the crop are *Battle of the Basses* and *The 1990 Mix – Part One*. Absolutely a must-buy for fans of Amiga music.

AMIGA 93%

The Invisible World

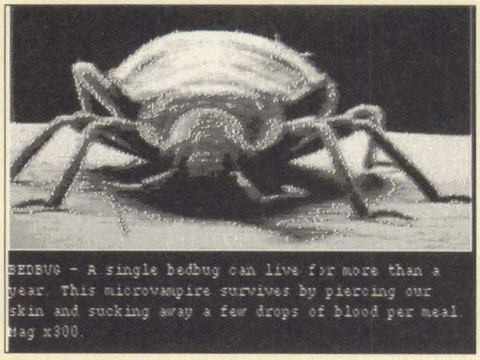
Amiga • The Disk
6 Stubbington Brink, Hebden Bridge, West Yorkshire HX7 6LR
☎ 0422 844215

Bit of a weird one this. Do you remember those *National Geographic*-type films in which they'd hire out a powerful microscope and take loads of groovy shots of what's living in your hair, on the carpet, under the stairs and in that cheeseburger you've just eaten? Well this is a selection of exactly that kind of piccy.

There are 30 piccies on the disk and they *all* make pretty grim viewing. There are three main sections split into 'The Living World', 'A Moment In Time' and 'A Small World'.

In the first section are such cheery sights as bedbugs which apparently suck human blood at night, rather than nipping down the grocers, and the pubic louse which lives, yes, well...

And then there's the grain mite which lives in flour of all places.



You'll never ever want to go to bed again after encountering this little chap in *The Invisible World*.

The second section is full of split-second events: balloons at the precise moment of rupture; apples and cards being sliced in two by bullets; and gunshots.

The final section is by far the scariest of them all, but for entirely different reasons. Here you'll see exactly what the head of a pin looks like, what a needle and thread look like and, cringe-makingly best of them all, the head of a dentist's diamond drill.

What with all the shots of broken and plaque-encrusted gnashers, it's enough to stop you ever visiting the dentist again. Gruesome and ghastly stuff.

AMIGA 75%

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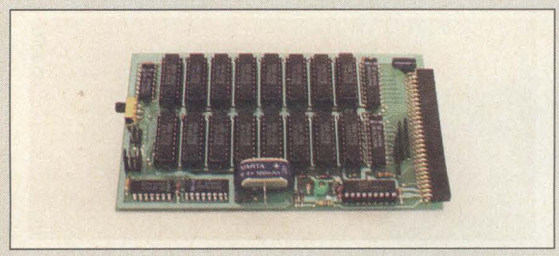

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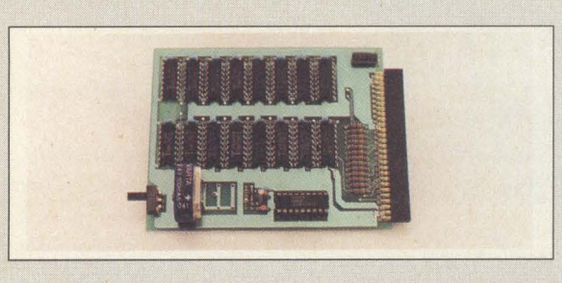

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cont. from p86

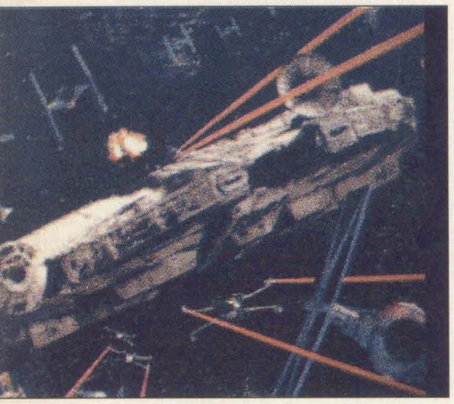
Exodus Slideshow

Amiga • 586 • New Wave
PO Box 199, Manchester M1 1JE
☎ 061 839 5378

Dear me, another duff slideshow. If your idea of fun is staring at ten extremely dull pictures, then by all means check out this disk. Personally I'd rather watch a test card.

The pictures range from a thrilling landscape shot, to some (what's the point of this slideshow) stills of someone's desk. The only positive thing you can say about this demo is that you can make the pictures go wobbly by moving the mouse or by hitting one of the function keys. Where's my disk formatter?

AMIGA 21%



Do you want to see this picture go wobbly? Then the *Exodus Slideshow* is for you.

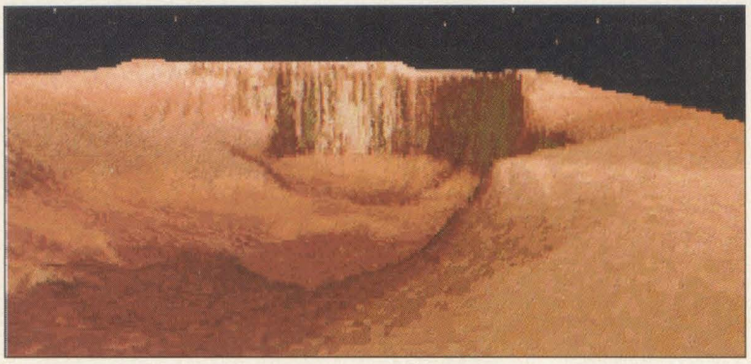
Vista Demo

Amiga • 1194 •
17 Bit Software
PO Box 97, Wakefield WF1 1XX

The *Vista* art package is a nifty program which enables a novice computer user to create accurately rendered images of the real world. This demo illustrates exactly the kind of effects that can be created if you're willing to sit there for 25 minutes while your Amiga performs some intensive maths calculations.

Picture quality on the demo is high – this is the disk you should check out if you're thinking of splashing out on *Vista*, but aren't *too* sure. Martian as well as terrestrial landscapes have been included on the disk and they're all terrific. Worth a look.

AMIGA 55%



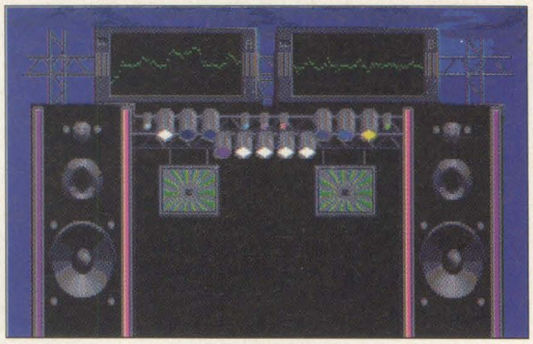
***Vista Demo* – no, not a collection of digitised images of cheap curries, but a taster of what the powerful *Vista* art package can achieve. More advertising in the public domain, really.**

Sect Concert

Amiga • 1105 •
17 Bit Software
PO Box 97, Wakefield WF1 1XX

Bit of a contradiction in terms really, because this isn't so much a concert as one extended piece of music. In fact, it's more an exercise in cramming as many samples as possible into one song. However, if your tastes run to MC Hammer, Bomb the Bass *and* James Brown then check it out.

AMIGA 62%



The graphics might not be anything startling, but don't let that put you off – the music on *Sect Concert* is well worth checking out.

Sonix Jukebox

Amiga • 1189 •
17 Bit Software
PO Box 97, Wakefield WF1 1XX

***Sonix Jukebox* – it looks pretty dull and it sounds even worse. Steer clear.**

Oh dear, bit of a sad disk this one. There are 13 tunes on the disk, created with the Aegis *Sonix* package and they're all dreadful. If you fancy making your Amiga sound like a Bontempi organ, then by all means slap this disk in your drive.

The author has plumped for some extremely weary songs, such as *Let it Be*, *Moonlight Shadow* and *Magnetic Fields* by Jean Michel Jarre. Amazingly they all sound worse than the tunes you get on digital watches. Actually, I take that back, because it's an insult to digital watches. Dire in the extreme.

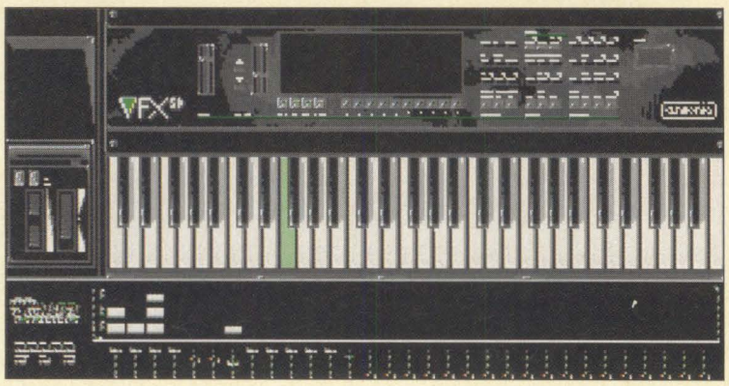
AMIGA 9%

Music Dreams I

Amiga • 1839 •17 Bit Software, PO Box 97, Wakefield WF1 1XX

It makes a lot of difference when a demo programmer actually bothers to take the time out to make their work look polished. That's exactly what's happened here. The coding group Phenomena has chosen to illustrate its tracker music with some attractive graphics, and this isn't just to cover up a load of naff tunes either.

There are 18 tunes on the disk. As each of them plays back, the keys on an on-screen synthesiser light up – in effect (and if you were *that* bothered) you could check out the chord transformations that the guys have employed and try 'em out on your own keyboard.



Who says that demos are useless? Using the impressive graphics on *Music Dreams I* you theoretically learn the chords and notes for all of the 18 tracks on the disk.

The tunes themselves are a bit on the samey side, though they're all well written, with some attention paid to the melodies. It's nice to see *Tracker* programmers cottoning onto the fact that sparse tunes sound just as good as six-trillion sample jobs.

AMIGA 72%

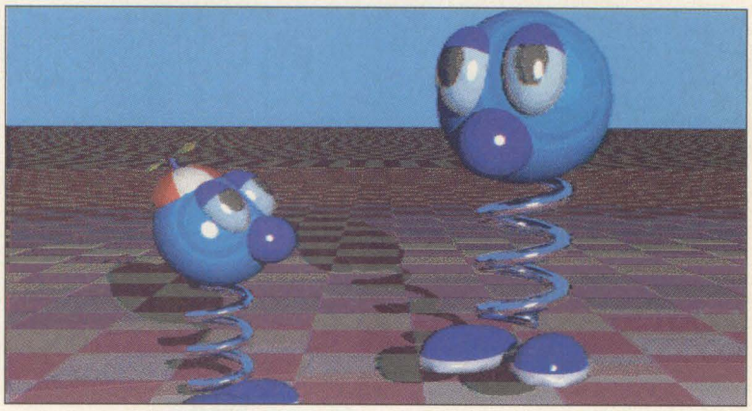
The Friday 13th Slideshow

Amiga • 1224 •
17 Bit Software
PO Box 97, Wakefield WF1 1XX

My gosh, this one's a bit spooky. Someone out there is a serious gore-hound, because this is a series of slides from, nope not *Friday13th*, but *Halloween*. If you've missed out on the seminal series of *Halloween* flicks then I should tell you that they're pretty grim and scary affairs with loads of severed limbs and not much plot.

All the shots from the film are in

Friday 13th Slideshow – no, all you horror movie buffs out there, we haven't made a mistake. The picture does come from *Halloween*, but that's what you'll find on this disk for some reason.



The Boings – more ray-traced marvels. The Boings might look more than a little bit silly but the animation and art is of a very high standard. The next mega-cult, maybe?

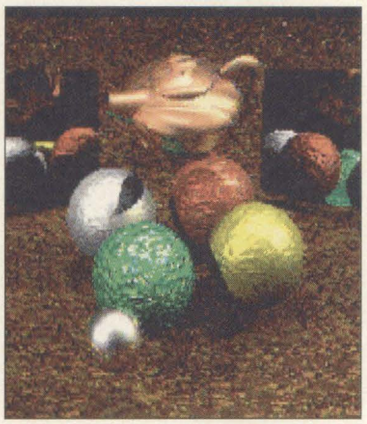
black and white, but this doesn't detract from the fact that they are extremely nasty. Loads of knives in legs, axes in heads and limbs on the floor basically. This stuff does appeal to some people, so if you've got a strong stomach, it might be just what you've been waiting for.

AMIGA 67%

Teapot Animation

Amiga • 1191 • 17 Bit Software PO Box 97, Wakefield WF1 1XX

This disk contains yet another ray-traced animation, this time featuring one of the most frequently ray-traced shapes – a teapot. The receptacle in question spins and rotates over a number of brightly-coloured and patterned balls while mirrors in the background reflect the animation.



And a big hand for that good old 3D demo standby, the teapot. What a star!

The colours seem a little garish compared to other ray-traced pictures and the animation isn't the smoothest in the world, but the objects and surfaces are quite interesting, making it worth a look for 3D fans.

AMIGA 68%

The Boings

Amiga • 1093 • 17 Bit Software PO Box 97, Wakefield WF1 1XX

I know what you're asking: "What the hell are Boings?" Well, the Boings are strange creatures with round heads and blobby feet mounted on spring-like bodies. It sounds strange, I know, but these are the things that successful kiddies' cartoons are made of, so don't be too sceptical!

The animation is yet another ray-traced piece, this one being simple but effective. The colours are bright and cheerful and the movement is beautifully smooth. Ray tracing may have been done to death, but the good use of colour and the sheer cuteness of the main characters make the demo well worth checking out.

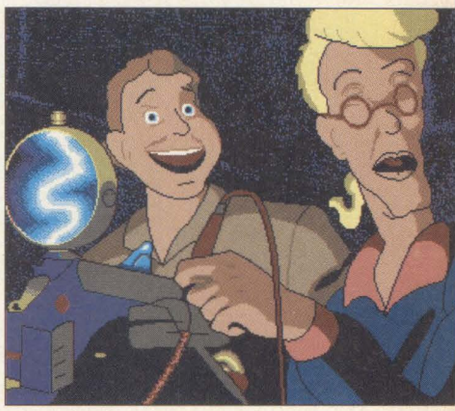
AMIGA 79%

Real Ghostbusters and Horse Animations

Amiga • X-Press PD 12 Hathaway Court, Cheriton Road, Gillingham ME8 0ES

The two animations on this disk are of the 'Saturday morning kids' TV' style, with killingly bright colours and exaggerated actions.

The *Ghostbusters* animation is taken directly from the opening credits of *The Real Ghostbusters* cartoon series, with the various members of the team rushing in response to an alarm call. Don't worry Slimer fans! He's in there too!



Why wait for *Motormouth* on a Saturday morning to watch *The Real Ghostbusters* when you can play this demo anytime?

The horse animation is a simple loop showing a desperado trying to get his horse to break into a gallop. But will the horse have any of it? Will he heck!

Both clips are fast and furious, with bright, cartoon-style graphics. There isn't any sound though, so you'll have to make do with the visuals on their own, I'm afraid!

AMIGA 78%

cont. on p90

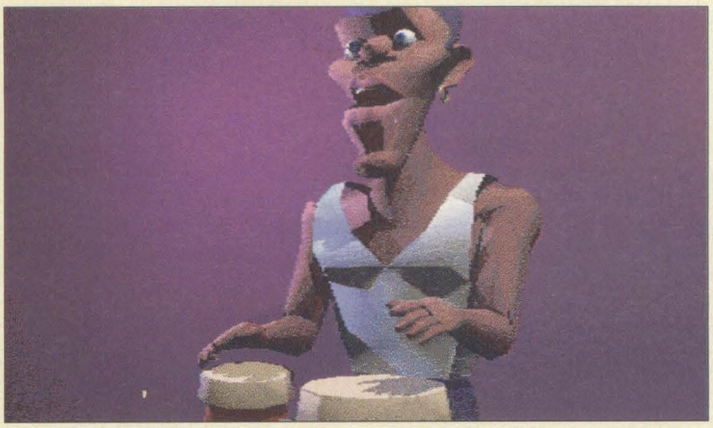
Congaman and Windmill

Amiga • 1096 • 17 Bit Software PO Box 97, Wakefield WF1 1XX

What's this? Ah! Yet more ray traced animations! Well PD demos are absolutely brimming with the things!

The windmill animation on this disk is pretty old and will probably have already been seen by a lot of you. *Congaman*, however, is a newer clip and features a bongo player beating up a storm on his drums.

The colours and shading are superb and are reminiscent of the style of animation produced on Vax terminals – the Genesis effect in *Star Trek II* was produced on one of these so that should give you some idea how good *Congaman* looks. Even if you've already got loads of ray-traced cartoons, this is worth a look. After all, it hardly costs anything, does it?



Congaman features some of the finest graphics and animation that can be achieved on an Amiga.

AMIGA 85%

cont. from p89

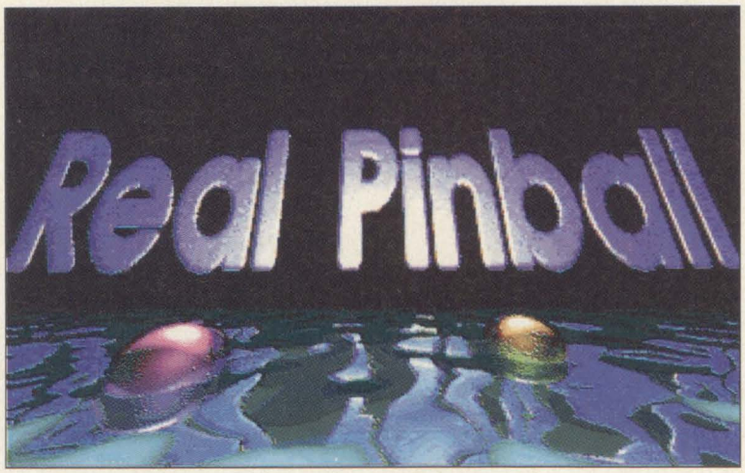
Real Pinball Animation

Amiga • 1190 •
17 Bit Software PO Box 97, Wakefield WF1 1XX

Occasionally, people release demos of projects they're working on into the PD scene to see how favourably they're received. It's much the same as a producer giving DJs advance copies of new dance records to see how many people strut their stuff to them.

This animation is apparently due to be the intro screen to a yet-to-be released pinball game. The clip was rendered in Real 3D, giving the surfaces a superb, reflective finish. The animation features a large metal logo hanging over a sea of what looks like mercury, with two balls floating in the liquid. It must have taken some considerable time to render even this simple clip, so show your appreciation and check it out.

AMIGA 88%

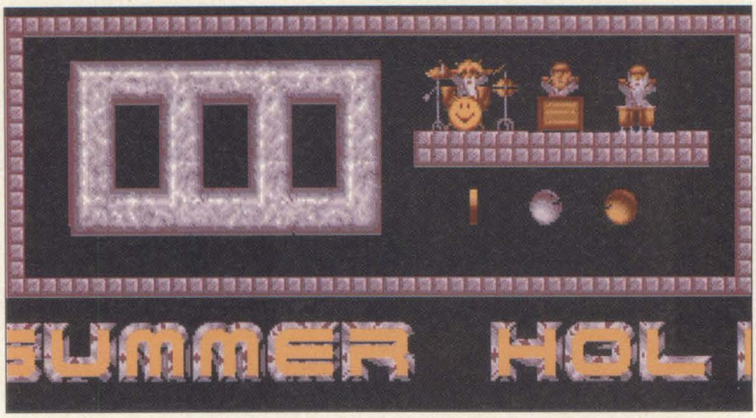


Real Pinball – **not really a demo in the usual sense, but rather a taster of the intro sequence to a forthcoming game based on, would you believe, pinball?**

Trans Beauce Party

ST • DEM G42 • MPH
10 Chandlers Court, Eaton Norwich, Norfolk

After kicking off with a piece of intro music performed by a strange band consisting of little blobby creatures, the Trans Beauce demo continues with a choice of programs from various coding groups. The first is a music demo accompanied by some very strangely animated Japanese comic pictures. Grimace away chaps!



Trans Beauce Party – **this little band of merry creatures welcomes you to the demo, but you might as well not bother pressing the space bar as they are the most fun part.**

Other demos include a vector show by OVR and a witty little intro featuring a mock-up of an Amiga Workbench by the Hemoroids. The demos are all pretty run-of-the-mill stuff, but there are a few amusing little clips which may make it worth a look.

ST 64%

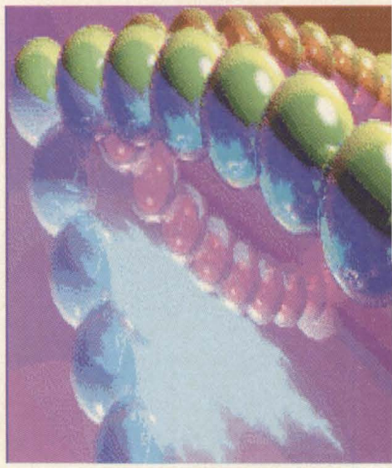
Inspiration Is None

Amiga • 1188 • 17 Bit Software PO Box 97, Wakefield WF1 1XX.

Continuing the fractal and ray-tracing theme, Anarchy has taken the idea as used by PMC in the *Alfa Omega* demo and produced its own animation.

The demo consists of a series of ray-traced balls flying over a perspective view of a Mandelbrot set. Hardly original, but the demo has a strange ethereal look about it, with subtle misty colours that are used to display the animation.

It may be simple but it's extremely pretty, so have a look.



Inspiration Is None – **If you are going to do a spinning ball demo, then do it in style.**

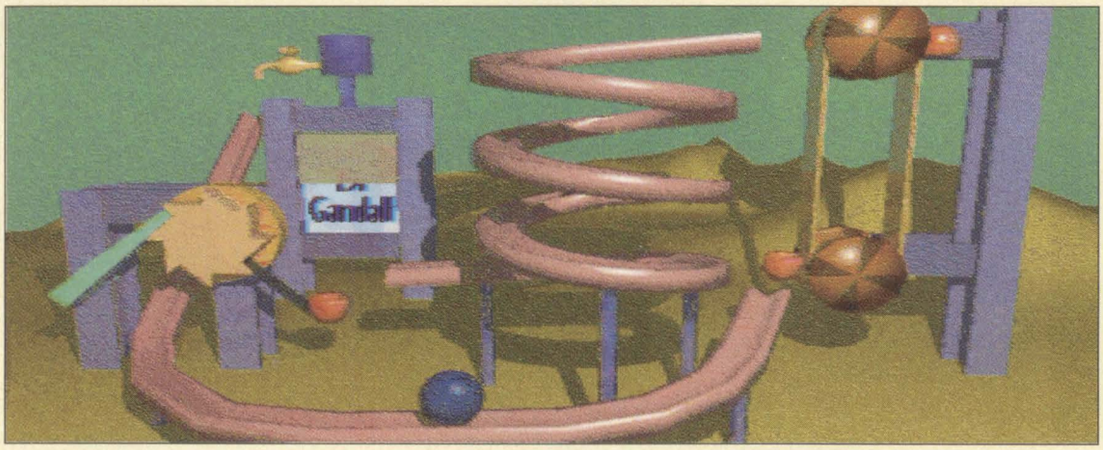
AMIGA 79%

Trackball Animation

Amiga • 999 •
17 Bit Software
PO Box 97, Wakefield
WF1 1XX

When people put together ray-traced animations of balls bouncing, it's usually just a simple loop with the ball bouncing up, hitting something and falling down again while a mirror makes the whole thing look real flashy by reflecting the whole proceedings.

This clip doesn't feature any fancy mirrored or textured surfaces, just solid shapes. The demo starts with a ball being raised on a lift and dropping out. It then runs down a spiral track and is catapulted into a water tank. Finally it 'drips' out of the tank's tap and runs around to return to the lift once more.



Trackball Animation – **a sequence devoid of flashy but hollow effects, which make this is a very simple but utterly engrossing demo.**

This may sound frivolous and silly, but...er...oh, all right. It *is* frivolous and silly, but that's where the appeal lies. The fancy effects of other animations have been replaced by yer actually interesting cartoon! Hopefully, we'll see more of these...

AMIGA 89%

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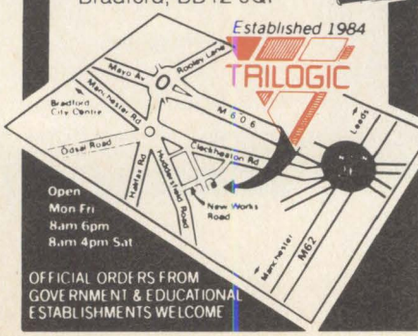

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cont. from p90

PC Demolition

In compiling this section on demos, one glaringly obvious fact has come to come to light – there's a real paucity of PC demos floating around.

What's wrong with all you PC demo writers? You don't feel defeated by your machine do you?

OK, so a PC version of *MED* might be a bit too far-fetched to contemplate, but what about all those lovely VGA graphics you have to play around with?

So come on all you PC coders. Prove to us what you can do!

In the meantime, here's a quick round-up of the some of the PC demos that have come into the *Public Domain* office so far.

Thunderbirds

PC • Academy
PO Box 65, Herne Bay'
Kent CT6 8YZ.
☎ 0227 360808.

Surprisingly good use has been made of the PC's rather limited sound capabilities with a couple of *Thunderbirds* demos. There's no great pictures of Gerry Anderson's string creations to get excited about – instead the demos simply play a section of sampled speech from the cult TV series: "Thunderbirds one, two and three are ready to go!"

Getting half-decent sound out of the PC is an achievement in itself. Marry this with some decent animation and we'd be half-way there.

PC 52%

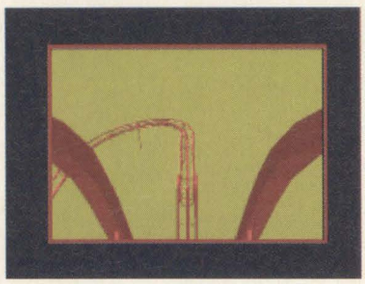
Rollercoaster Demo

PC • Academy
PO Box 65, Herne Bay'
Kent CT6 8YZ.
☎ 0227 360808.

The title just about sums it up really. It's is a very brief demo viewed from the front carriage of a rollercoaster.

The initial impact is quite stomach churning, and I wouldn't like to try those dips on a real-life big dipper, but you very quickly come to realise that the whole thing is in one loop that only lasts for about ten seconds at the most.

The graphics are a bit blocky, but you hardly notice because the whole thing goes at such a rate.



Try a stomach-churning ride on the big dipper in the *Rollercoaster Demo*.

Smooth and slick animation, but not really up to the standard we're used to from the top animations on the other 16-bit machines.

PC 60%

X-29

PC • Academy
PO Box 65, Herne Bay'
Kent CT6 8YZ.
☎ 0227 360808.

In a similar vein to Rollercoaster is *X-29*, an animation produced with the same package, but this time of a fighter plane as it moves through the air. The plane does a couple of half-rolls before disappearing off the top of the screen, to be replaced by a similar aircraft coming in from the bottom.

And the reason the new plane looks so similar is because it's identical. It's another rolling demo; a few dozen frames of animation strung together and looped to produce a rolling demo. It must be said that it's a long way from being Eric Schwartz's *Aerotoon* standards.

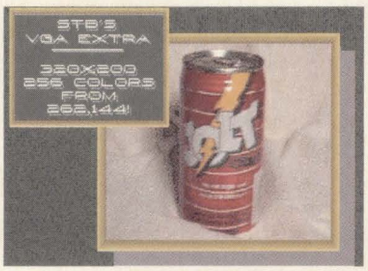
PC 48%

Flying tonight. The X29 demo features a fighter and a strong sense of déja-vu.

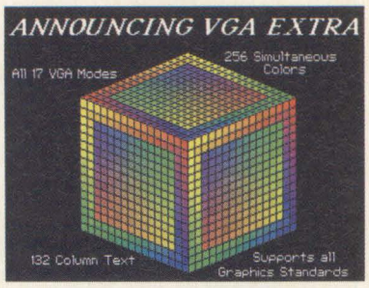
VGA Demo

PC • Academy
PO Box 65, Herne Bay'
Kent CT6 8YZ.
☎ 0227 360808.

There's very little in the way of demos written for their own sake on the PC like there is on the ST and Amiga. Many demos are of commercial products, showing off their capabilities on the PC. *VGAdemo*, is very pretty, showing 256 colours on-screen at once, but is fairly tame compared to what you might expect on the more 'home-based' 16-bit machines.



The pretty, but rather tame *VGA Demo* isn't likely to give you much of a jolt.



***VGA Extra* offers much for the PC user, but is passé by Amiga standards.**

It shows off a cube with plenty of colours, a rotating cola can, and a screen full of flowers – nothing that's going to set the world on fire. Not because it's not well done – the can, for instance, is beautifully drawn – it's just not exciting.

We need writers with the enthusiasm of the Amiga and ST demo crews to start writing for this machine. Then we'll have really have something to sing about!

PC 62%

Mean Streets

PC • Academy
PO Box 65, Herne Bay'
Kent CT6 8YZ.
☎ 0227 360808.

Mean Streets is very impressive, but that's because it's a demo of a commercial game and has obviously had lots of money put into it.

The graphics are impressive, but even better is the sound – music and sound fx that send you at first jumping out of your skin, then swiftly reaching for the volume control.

***Mean Streets* has had money aplenty lavished on it, but is still relatively tame.**

But this is just a game demo. It may make you buy the game, but it won't inspire new demo writers.

PC 60%

UP...DEMOS ROUND-UP...DEMOS ROUND-UP...DEMOS ROUND-UP...DEMOS ROUND

Alternative Animations 42%

Amiga • 1196 • 17 Bit Software
Described as alternative, this is actually just dull. Starts with a stealth fighter flying over a prehistoric swamp and and ends with a tedious rendition of the old Grif Rhys Jones Holsten ads. The clips leave a lot to be desired technically.

Coyote Strikes Back 78%

Amiga • 978 • 17 Bit Software
Very bright and colourful animation featuring Wile E Coyote getting his own back on Road Runner for a change. A bit short, though.

Walking Legs 80%

Amiga • 984 • 17 Bit Software
Superb ray-traced demo reminiscent of Herbie Hancock's *Rockit* video. Very odd.

Elektra Reset 25%

ST • DEM 098 • Surrey PD Club
Fantastic scroll effects! Multi-colour raster splitting! Superb fonts! Great soundtrack! This demo hasn't got any of these. The *Elektra* demo is basically a mickey-take of all the coders who take their 'art' so seriously. The scrolling is terrible, the music a cacophony and the raster effects are dire. 25 per cent for the sheer humour, but none for the code!

Dragon's Lair 74%

ST • The Other PD Library
The demo is basically an advert for Readysoft's ST conversion of the *Dragon's Lair* coin-op, and features a few scenes from various points in the adventure. The graphics, sampled speech and music are pretty good, but it seems a bit dodgy to circulate adverts as PD.

XTC 58%

ST • CHO75/D • C Hack's PD
A rather dull compilation with lots of bright but unexciting graphics. It even features a digitised picture of an Atari hard drive. I ask you!

Alien Blipmovie 86%

Amiga • 1203 and 1204 17 Bit Software
Two disk-demo featuring digitised pictures from *Alien*, along with captions telling the story. The pictures have been very well digitised, capturing the dark, grimy atmosphere of the film without being blurred and dingy.

Life of Brian 35%

Amiga • 1150 • 17 Bit Software
Largely bland demo – after one listening you'll have consigned the disks to the circular filing cabinet. Dull sample of the 'Big Nose' sequence in the film.

S-Express Demo 59%

ST • DEM G09 • MPH
This demo doesn't really contain much in the way of whizzy visual effects but the main thing about the demo is the sampled sound. Put together by APA, it is constructed from sampled sections from the first S-Express single. It's not the clearest sampling ever, but there is quite a lot in there, so some compensation is needed.

Greenpeace 30%

Amiga • 1067 • 17 Bit Software
Greenpeace may be for a good cause, but that's no excuse for this dire demo. The music is dull, the text is simplistic and the pictures are bland.

Humanoid Mix 56%

ST • 068/D • C Hack's PD
A *Star Wars* stormtrooper does a silly dance to a very boring sampled tune. Steer clear.

Taxi Driver 75%

Amiga • 1110 • 17 Bit Software
Yes! This is what we like to see! Seminal films on PD demo disks. This demo isn't technically superb, consisting of a sample loop, a *Tracker* tune, a digitised loading picture and a short digitised animation. But what a great subject!

Sinking Demand 57%

Amiga • 1168 • 17 Bit Software
Starting off pretty weirdly with a zooming view of a Julia curve, this demo then gets mundane. The main body of the demo is taken up with a shuttle whizzing across the screen and a series of text pages over a strange, swirling background.

Mandel Mountains 78%

Amiga • 831 • Amiganuts
Three-dimensional Mandelbrot generator. Very impressive results, but very slow. A good deal of patience is necessary.

Isen Ray-Trace Demo 74%

ST • DEM 680C •
Lots of revolving ray-traced balls. The style of the demo isn't anything radically new, but it is brightly coloured, pretty to watch and it doesn't contain 50K worth of greetings messages!

Luxo Teenager 81%

Amiga • 637 • New Wave
Follow up to the award winning *Luxo* animation featuring angle-poise lamps. In this one, mother and child lamp are back and the kid is again messing around with the ball. I won't tell you the rest of the plot as the demo is extremely short. However, it is exceptionally well animated; very smooth and brilliantly shaded.

Asteroid Anim 80%

Amiga • 998 • 17 Bit Software
This is the second in a series of 17 Bit disks featuring 'classic' animations from PD history. It contains an animation viewed from the docking bay of a *Star Wars* X-Wing fighter flying through an asteroid field.

Teenage Mutant Ninja Turtles 55%

ST • MEG 27 • Trust PD
Sampled turtles hit with no graphics. Surely terminally untrendy by now. Quality of the sampling is good, however.

The Holy Grail and The Young Ones 58%

ST • CH031-D • Captain Hack's PD
This disk actually contains just a couple of pictures backed up with tunes from the film and TV show. The samples are clear enough, but the whole thing is a little short and hardly seems worth the bother.

Vic Reeves Demo 78%

Amiga • 1217 and 1218 • 17 Bit Software
Two-disk demo kicking off with a sampled version of the *Big Night Out* theme tune, followed by a pretty dodgy rendition of *Born Free*. The main part of the demo is taken up with various digitised pictures from the TV show along with suitably witty captions. Pretty good stuff.

VTOL Contest 90%

Amiga • 1794 • PD Soft
One of the highly successful series of *Aerotoons* cartoons. An Osprey takes off from an airfield, and is overtaken by a rather more nippy Harrier jump-jet. This peeves the Osprey and he tries to out-fly the Harrier, with disastrous results.

STE Acid Demo 92%

STE • Prophecy PD
This STE-only demo was compiled to demonstrate the sampled music qualities of the improved ST. This isn't a *Soundtracker* song, it's a series of samples looped together seamlessly to create a high-quality sound. Acid house in style, the song includes excellent voice samples.

Topless 20%

Amiga • 1002 • 17 Bit Software
No prizes for guessing what the content of this demo is. Someone's flicked through their favourite soft-porn magazine, digitised 15 pictures and bunged the results on a disk. Very poorly done as well.

Real 3D Demo 57%

Amiga • 17 Bit Software
A product demo showing what the *Real 3D* package is capable of achieving. Only of real interest to those thinking of buying the product.

Harry Met Sally 68%

ST • DEM 540E • Paradise
Yes, it's that bit from the film. Meg Ryan pretending to have an orgasm. A couple of digitised pictures of Meg in mid-moan. Should shock your aunty Meg; otherwise a bit pointless.

Batman Movie Demo 75%

Amiga • 1001 • Senlac Software
Not digitised from the movie but a totally new animation. Good graphics, a groan-inducing naff twist and a brill end theme.

VDU DEMO 70%

ST • MT Software
Rather icky tale telling the dangers of VDU radiation. Yuk pictures, tons of text, but done well.

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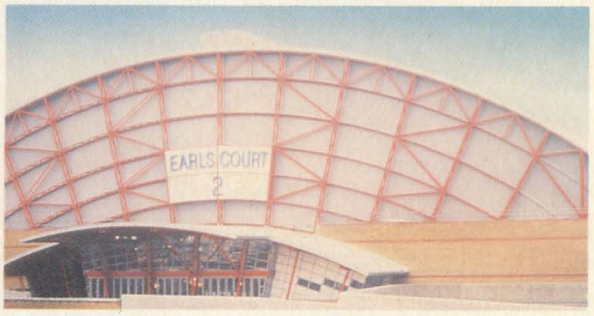

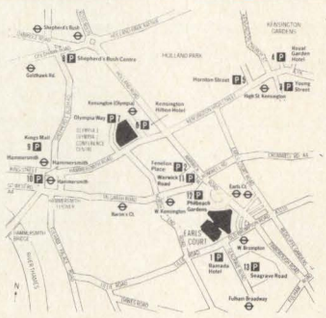

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But why do they do it...?

Are PD programmers mad? They spend months coding a digital masterpiece only to give it away without any financial reward. Is it just philanthropy that drives them, or the pride in knowing that thousands of people will see their work? Jason Holborn investigates...

Ever since Clive Sinclair launched his ZX80 on to the consumer market back in the early eighties, the popular press has delighted in presenting the life of a programmer as a glamourous one. Fuelled by media hype and images of youths driving around in Ferraris with jewellry dripping off their tanned bodies, a whole generation of computer enthusiasts has grown up with its sights set on becoming rich and famous through coding.

The fact is, some programmers do make a lot of money. Take, for example, David Braben, the co-author of the all-time classic Acornsoft game *Elite* (originally released on the BBC). When it was released back in 1983, *Elite* sold like hot cakes and was very quickly converted to just about every computer format under the sun (including the Amiga, ST and PC).

Even today, *Elite* is still selling, with Braben's bank account looking healthier by the minute. Braben is rumoured to have made a six-figure sum out of *Elite* – then, of course, there's the money he made out of his other 3D masterpiece *Zarch* (released under the name *Virus* for the ST, Amiga and PC) – and we've still to see *Elite 2*, a game that will probably make Braben even more money than the original. If ever there was an example of a millionaire programmer, Braben is the closest you're likely to find.

Money talks

As you can probably already start to appreciate, there are big bucks to be made out of programming. If you've got the business sense, programming talent and – most importantly – the good ideas needed to make a program a success, then you too could be driving around in a Ferrari with the man from the Inland Revenue in hot pursuit.

Not all programmers want to make large amounts of money, however. Take, from example, the programmers that have made the PD libraries what they are today. Such names as Steve Tibbet, Timm Martin and Teijo Kinnunen contribute on a regular basis to the PD scene, often making little in the way of money for their efforts.

Such schemes as shareware and licenceware make these programmers a little money, but it's very little in comparison to the kind of dosh that a successful commercial software writer could make. More often that not, PD programmers receive hardly anything in the way of payment for their efforts.

Sandra Sharkey, the head of the AMOS PD Library, is one such programmer. Although Sandra now confines her efforts solely to the distribution of PD, she did once dip her toes into programming using Incentive's *STAC*. Although the game she wrote shifted many copies, Sandra did not receive a single penny in shareware contribution – despite the fact that many of the game's users wrote to her to praise the program's quality.

"Such schemes as shareware and licenceware can help programmers earn a little money, but it's a very small amount in comparison to the kind of dosh that a successful commercial writer could make."

Another example is Mark Meany, the author of the Amiga PD program *Words* which is distributed in this country by AmigaNuts United. Thousands of copies of the PD version of Mark's anagram/crossword solver program were sold, but Mark received no payment whatsoever. In an attempt to return some cash from his hard work, Mark enhanced the program and offered it to existing users for a measly £5. Although virtually all those that bought the program found it to be very useful indeed, only 20 people actually payed out £5 for the full version. As a result, from the thousands of copies sold, Mark made just £100 – hardly enough to cover development costs, let alone enough to put a few pounds in his pocket.

Don't bank on it

The simple fact is, no PD programmer ever became a millionaire from user contributions. While the programs they write may sell like hotcakes, the responsibility of actually paying the author is left to the user's own conscience. Unfortunately, it's a sad fact that the vast majority of PD consumers never actually get around to paying shareware contributions. Whether this is because they just don't have either the time, money or honesty to do so is unimportant, but the fact remains that the only person to suffer is the programmer.

Even some of the more reliable methods of payment are very unlikely to raise enough cash for the programmer to live on. Such systems as licenceware guarantee the programmer at least a token payment, but the relatively high price of licenceware products often deter potential users from purchasing them. As a result, sales are reduced. Even on successful licenceware titles, the authors rarely make that much money – a couple of hundred pounds is about as much as they will ever get.

So why do PD programmers choose to work for months on a program, only to give it away? Quality certainly isn't a problem – programs such as Teijo Kinnunen's *MED* and Timm Martin's *SID* utility are as good, if not better, than commercial offerings. So why do they do it? Is it a case of simple human kindness or are they just completely bonkers?

***Llamatron* was a massive gamble by Jeff Minter. He could easily have sold it to a budget label for a quick buck, but instead he released it as shareware and firmly believes he has made more money this way.**

In an attempt to answer this question, we spoke to a number of top PD programmers and distributors. Here's what they had to say...

Probably one of the most famous programmers of all time must be Jeff Minter, the prolific (if somewhat strange) head honcho at Llamasoft, a software house that has been producing commercial games software and alternative entertainment products for a great many years now.

Jeff, who writes the vast majority of the software himself, has become something of a cult hero thanks to his own peculiar brand of weird and wonderful games. Moving up from such humble machines as the VIC-20, C16 and Atari 800 (remember them!), Jeff now concentrates his efforts almost exclusively on the ST, Amiga and PC.

Exiting commerce

Up until quite recently, all of Llamasoft's products were sold commercially; first through Llamasoft itself and then through third-party labels, such as Atari's ARC. While this method of distribution worked to an extent, the changing face of the games industry forced Jeff to undertake an experiment – to release his products into the shareware market.

Many saw this as financial suicide, but Jeff was forward-thinking enough to see the obvious advantages of such an approach. In the early days the decision to go shareware was nothing more than an experiment, fuelled by Jeff's disillusionment at the current state of the games market. As Jeff himself states, it has become increasingly hard for smaller outfits to release a good game.

Jeff really has become bitter about the whole affair. As he is more than happy to point out, most publishers seem only to want games that follow a conventional format – if a game isn't a hyped blockbuster that takes years to play, or it doesn't look like *R-Type*, then a lot of publishers just don't want to know. In some ways you can't blame them – after all, such games do sell very well, but they hardly encourage the kind of individualism and originality that have become the trademarks of many of Jeff's games.

After finishing *Defender 2* for ARC, Jeff had a little time to spare between projects so he set out to write a home version of the classic Williams' game *Robotron*. In no time at all, *Llamatron* was born. After finishing the game, Jeff wondered what to do with it. Sure, he could probably have sold it to a budget label and maybe sell a couple of thousand copies, but Jeff felt that his game deserved far better than that. So, as an experiment, he decided to try putting the game out as an item of shareware.

Jeff is very enthusiastic about shareware. Providing that all the parties involved are honest, Jeff sees shareware as a near-perfect means of software distribution – you write a game and, when the time comes to put it out, you don't have to spend thousands of pounds on flashy packaging, advertising and duplication. All that is required is for the programmer to send a copy to as many PD libraries as he can think of and that's it. The rest is handled by the libraries.

The PD libraries are obviously happy because they make money by cataloguing and duplicating Jeff's games, while the users are happy because they get the chance to play a commercial-quality game for little more than the cost of a disk. Users are only obliged to pay if they actually think that the software deserves the asking price – in the case of *Llamatron*, the shareware registration fee is a mere £5.

To make registering even more attractive to the end user, Jeff chucks in a few extra goodies including a copy of his newsletter, *The Nature of the Beast*, and *Andes Attack*, another Minter game of commercial quality. As Jeff himself is so very keen to point out, two games for the price of a fiver isn't bad value for money at all!

Everybody loves a llama

Since *Llamatron* was placed into the shareware network, Llamasoft has received no fewer than 800 registrations, mostly from the ST release. The Amiga version hasn't been available for long, although Amiga registrations are already starting to trickle through steadily.

So far Llamasoft has made about £4,000 out of the ST version and the company is still receiving about five registrations per day. If Amiga owners prove to be as honest as their ST counterparts, Llamasoft hopes to have made something in the

Would you work for Budgie feed?

Budgie was set up in 1987 as a collective of software writers for the ST. Four years and 147 disks on and the group has 44 members – including the renowned Lost Boys demo-writing group – all releasing software as licenceware. This means that the group only allows certain PD libraries to distribute its wares, and in return they ask that the libraries send them 50p for every copy sold.

But, Camy Maertens, one of the group's founder members, is quick to point out: "Budgie is not merely a way of collecting royalties on behalf of the authors, but also an exchange of information amongst programmers. One of the lads might be good at writing music, so the other 43 can ask him to write a tune for them."

The money that Budgie does make is distributed among the programmers: "It's distributed on the basis of one share for one game written."

But he points out that earning dosh is not the reason why programmers join the group. "Nobody's going to get rich on 50p. Last quarter we received £1,500 from the 39 libraries. So someone like Gary Wheaton, who wrote games such as *Space Invaders* and *Galaxians*, and who wrote 19 games last quarter, received just under £200. It's not a lot, but he can pay for his beer now."

If you are a programmer interested in writing licenceware for Budgie, then the group can be contacted at 5 Minster Close, Rayleigh, Essex SS6 8SF.

Budgie games, such as *Avina Blue*, are distributed through PD libraries, but the programmers receive a small royalty on all programs sold.

region of £10,000 out of just *Llamatron*. While this isn't as much as you might make from a best-selling commercial release, it's still a very reasonable amount of money, especially when you compare it to the amount that Llamasoft would have made if the game had been released as on a budget label. Jeff strongly believes that he would have made much less.

With software piracy rife these days, Llamasoft's decision to go shareware has virtually eradicated the problem for the company. Because the whole idea of shareware is that the disks are distributed as much as possible, software pirates would actually be doing Llamasoft a favour if they were to distribute *Llamatron*. After all, the more people that obtain a copy of *Llamatron*, the more registration fees that Llamasoft will receive. OK, even Jeff himself admits that not everyone will pay the registration fee, but a significant proportion will. If you yourself own a copy of *Llamasoft*, then you owe it to Jeff and his company to pay up.

Jeff admits that when he first proposed the idea of releasing Llamasoft's products into the PD libraries, it took a fair bit of persuasion to convince others at Llamasoft that it was a good idea, but with the success of *Llamatron*, everyone is totally convinced.

Len Tucker has has gained such a reputation for himself through his licenceware products, such as *Thingamajig*, that he is now working for commercial companies like GeniSoft and Europress.

As a method of selling software, Jeff genuinely believes that shareware works. Despite all the stories that we hear from other shareware authors, Llamasoft has found that shareware is a viable alternative to the commercial way of selling software. Although total unit sales may be lower, the profit margins are a good deal higher.

Releasing *Llamatron* as a shareware product has also proved to be a far friendlier method of distribution. Previously, Llamasoft had very much been cut off from many of its customers, but the shareware experiment has brought the company far closer to the people that really count – you, the user. Along with shareware contributions, Jeff has received many letters from users praising his game and offering constructive criticism. Most professional programmers would probably have taken offence, but Jeff has read them all, taking note of what people have had to say.

As Llamasoft would stress, a shareware program is almost exactly the same as a commercial product – minus the flashy packaging, of course! A shareware program is freely distributable, but you're bound by morality to pay the author a contribution. If you don't, then you are literally stealing that program. OK, the chances of having a visit from the boys in blue is virtually non-existent, but that's not the point. The point is, shareware software is copyrighted just like commercial software.

More than PD

The problem that shareware currently has is that many users still see it as nothing more than an extension to PD. Many libraries are attempting to separate the two completely, marketing shareware products in a very similar manner to commercial software. As Mike Goodman of Goodman PDL is keen to point out, shareware will never really be taken seriously until the user is educated – as it stands, for every 100 copies of a particular shareware program sold, only five users actually register. As you can probably appreciate, this is hardly an acceptable state of affairs.

However, on the whole shareware does work, but there are better systems around. Sandra Sharkey's licenceware scheme is an example of a form of shareware that guarantees the author at least a token payment. Licenceware may not earn the programmer so much money from each unit sold, but the responsibility for sending in the shareware contribution is taken away from the user. In some ways, it's a much kinder way of getting the user to pay up – put simply, because the disks are still relatively cheap, users don't even realise that they are actually paying a registration fee.

Jeff isn't the only programmer who has gained as a direct result of placing his programs into the public domain. Another programmer who has done very nicely is Len Tucker, an Amiga fanatic who has contributed on a regular basis to Sandra Sharkey's AMOS PD Library.

Programming exclusively with Mandarin's AMOS

Bridging the gap

MPH is a link between the worlds of public domain and commercial software. The company actually produces its own commercial products, including the *TCB Tracker* and Monster Stereo Cartridge, but it also operates a sizeable PD library. Steven Minns is the man who looks after the programmers. He sees the public domain as a training ground for fresh new programming talent. And MPH certainly takes full advantage of the wealth of talent out there.

"Most people write public domain programs for the publicity – to get themselves a job in the future," he reckons. "The only people we hire for our commercial software are people who've produced public domain demos. We take into account the past experience they've had with computers. *TCB Tracker*, for instance, was written by a member of The Care Bears – a very famous ST demo crew.

"Monster Stereo Cartridge was also written by a demo creator. *Audio Sculpture* is being written for us by a French demo crew.

"The public domain is a place where you can test out your ideas and get to see what the public thinks of them."

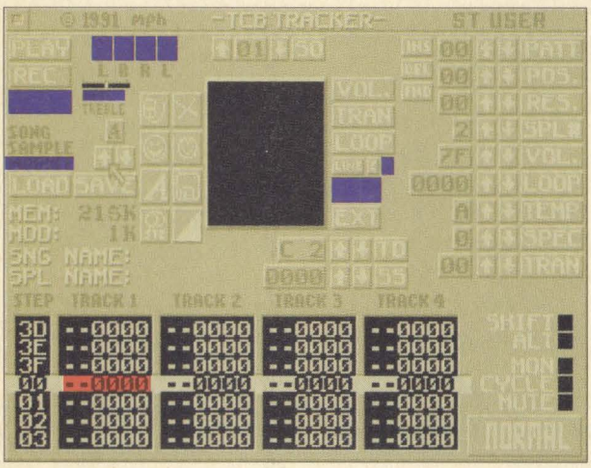
So why does he think people are prepared to write for the public domain when they receive so little for in return for their efforts?

"They may have written it for their own use. They may then show it to a friend who says: 'That's brilliant! Why not put it into the public domain?' And why not?

"It may have been something they've written for an A-level or GCSE project. That's one of the most common, actually."

Steve believes that it's possible for anyone with enough determination to make the jump from PD to commercial projects. All you have to do, he reckons, is: "Start on the project. Get all the information together you need to complete it, tell the software house your basic idea, if they're interested they'll want more information. Ensure that they sign a non-disclosure agreement before you let them know any of the real details, but otherwise, take it from there!"

Simple, really.



MPH's *TCB Tracker* program was produced by a former member of The Care Bears, a rather famous ST demo coding group.

game creation language, Len has produced no fewer than ten titles, most of which have made it into the AMOS library's licenceware scheme.

As with Jeff, the financial rewards have been considerable. Although a specific figure could not be extracted, Len has made a four-figure sum out of just three of his disks, which isn't bad at all when you consider that Len receives just one pound for every disk sold. Licenceware doesn't quite produce the kind of returns per unit sold that shareware offers, but it has one distinct advantage – it offers guaranteed payment. Although it is still susceptible to piracy, at least the authors know that they will receive at least something for every genuine disk sold.

The financial rewards are obviously very attractive, but Len has gained far more than just money from his involvement in PD. Because of the quality of his programs, Len is now working on commercial software for a number of well-known companies, including such big names as GeniSoft and Europress Software.

"Some users still don't realise that a shareware program isn't something that can be passed around willy-nilly."

This brings us neatly on to another very important reason why PD programmers do what they do – PD libraries provide free advertising for both the author and his wares. Len is the obvious example of this. As Len himself agrees, without his involvement with PD, he would almost certainly not have been offered the large amounts of work that he is currently undertaking. PD libraries are a great platform for programmers that want to get their name known.

This is perhaps the reason why demos are so popular these days. If you've had the chance to look through a demo, you'll notice that many of them are almost exclusively devoted to advertising the programmer and his particular 'crew'. Although such crews have been getting a lot of bad press just recently because of some being involved with piracy, others contain nothing more than enthusiasts who want to get their names known.

Believe it or not, many of the big-name games programmers we see in magazines actually started their careers writing demos in one of the many demo coding crews. Unfortunately, because of the stigma associated with such crews, very few of the them are brave enough to admit to being involved.

Finally, many programmers use such schemes as shareware as a stepping stone to much larger projects. Simply by pushing under-developed versions of programs into the shareware circuit, both programmers and their product will soon become well known. So, once the final commercial version of the program is complete, the program is already well established. This has happened many times in the past. *Fast Copy* for the ST is a prime example.

Not all programmers want to make money – some submit their programs to PD libraries without the intention of making any money. Once again, this helps them to get their names known, but there are others reasons why these people choose to turn their backs on possible financial gain.

Not enough to share

In many cases, programs submitted as public domain or freeware are smaller utilities that do not justify being sold as shareware. There are exceptions to this rule, but larger utilities are sold either as shareware or licenceware. Programmers often contribute smaller sections of code which can be used as the framework for further development. While such PD is of little use to the end user, it encourages authors to develop programs further, enhancing the overall quality of PD.

This sort of shared development is very common to PD libraries. One programmer will start the project rolling with a minimal implementation of a particular application. And, because many authors also distribute their source code with programs, other programmers pick up the project and enhance it, adding new features and fixing bugs. After little more than a few revisions, the application can turn into a quite capable performer.

Shared development of applications is very good, not only for the end user (who gets to use the result of programmer's efforts), but also for the programmers themselves. For little more than the price of a disk, programmers have instant access to commonly-used routines that have been pre-written by others, such as file requesters, fast-sort routines and even complete libraries.

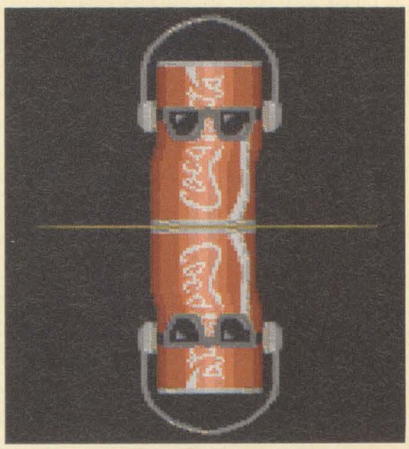
So why do programmers choose the PD libraries in preference to commercial distribution? What is obvious is that many authors put their wares into shareware libraries for nothing more than financial gain. Although they do not expect to make the kind of mega bucks of a commercial release, shareware cuts out the middle man. By releasing a program as shareware, the author need not pay a penny in marketing and distribution costs.

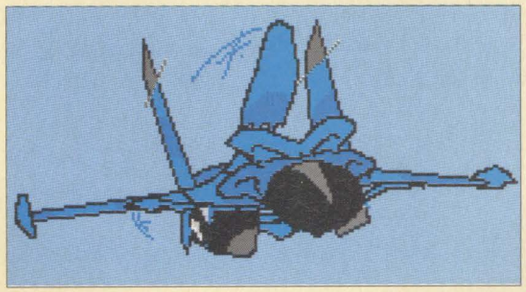
The only problem with this method of distribution is that of user perception of the shareware concept. Unlike a commercial release, some users still don't realise that a shareware program isn't something that can be passed around and used willy-nilly.

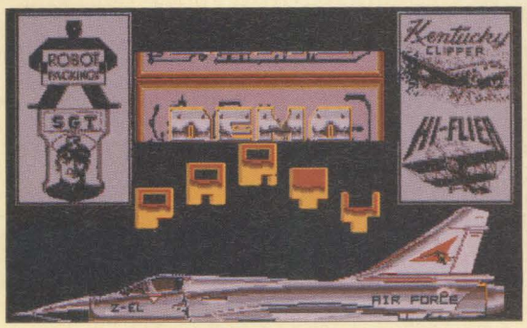
In the end, the fact still remains that PD benefits all of the parties involved – the programmer, the PD library and, of course, the user. Programmers get exposure and the chance to make some money, while the PD library makes money out of distributing their disks. In turn, the end user benefits through access to quality software for a very low price. PD

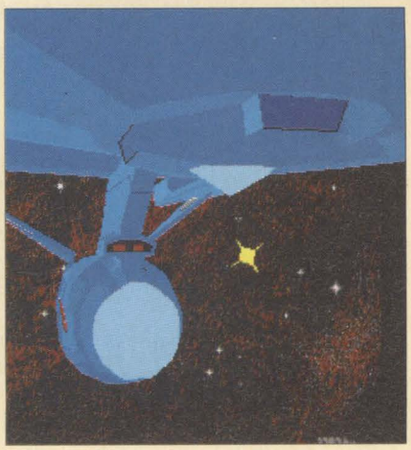
If you'd kindly allow us to demonstrate...

One way in which programmers can really show off their talents and try to impress commercial companies is through demos. Some demos feature graphics and music that appear to exceed the specifications of the machine. They range from original animations with stories, such as the Eric Schwartz's *Aerotoons* series (below), to stunning SF effects, or the just plain silly. But one of the favourite forms for a long time has been the scrolling text demo (bottom). They might seem banal, but they certainly make people sit up and take notice!









WIN SOME PINS!

Do yourself a favour, plug yourself into a printer! And if you enter our competition, you may not even have to shell out the (very reasonable indeed) £185 or so it cost to get your hands on a superb Panasonic KX-P1123!

Yes, it's true! Our pals at Panasonic have agreed to give no less than four of these top 24-pin printers away. Just to remind you how good it is, we awarded it 90% in our printer round-up this issue (see pages 77-81). It came top out of all the 24-pins we tested, and no wonder! Just take a look at these features:

- **10K buffer frees the computer while you print large documents.**
- **360x360 dots per inch for printing high-resolution graphics.**
- **Extensive control panel allows you to change fonts, type styles and character pitches.**
- **Excellent print quality allows you to print letters that would impress your bank manager.**
- **Built-in tractor feed mechanism makes paper changing fun (almost!)**
- **It's cheap! (That's if you don't win, of course!)**

How can you get your hands on this wonderful prize? Simple! Just answer these six questions, stick 'em on the back of a post-card, and send them to the address below.

1. What is the device that 'feeds' the printer with continuous paper called?
- A Tractor feed?
- B Chicken feed?
- C Combine harvester feed?

2. Which of these is a real font?
- A Taxi?
- B Courier?
- C Roman Catholic?

3. In computer terms what does 'cps' stand for?
- A Crown Prosecution Sevice?
- B Crystal Palace supporter?
- C Characters per second?

4. How much, roughly, do you reckon the KX-P1123 weighs?
- A 7.1kg?
- B 16 Tons?
- C 0.83 micrograms?

5. What is world famous audio, video (and printer) manufacturer Panasonic's motto?
- A 'I'll be back'?
- B 'The state of the art'?
- C 'Beanz meanz Heinz'?

6. How many pins does a 24-pin printer have?
- A 9?
- B 23?
- C 24?

Jot your name, address and answers on the back of a postcard (or stuck down envelope) and send it to:

I'll never write again, *Public Domain*, 29 Monmouth Street, Bath BA1 2BW

The rules:

Employees of Future Publishing, Panasonic and British Telecom may not enter. (Oh all right, BT employees can, but we don't like it any more than you do.)

The winners will be the first four drawn out of the Editor's hat, and will be printed in issue 3 of *Public Domain*. The Ed's decision is final, and no correspondence will be entered into.

The closing date is 31st December 1991 (but don't forget to account for the Christmas post!)

Only one entry per household, multiple entries will be recycled!

It covers Public Domain in great depth... It concentrates on the Amiga, the ST and the PC... It features a Cover Disk every issue... and yet it's not Public Domain. What is it?

In fact, it's ***New Computer Express***. And if you didn't know the answer, perhaps you should give it a try.

Here are four good reasons:

- It's out every week – and therefore it's always first with the news and first with reviews. That means, when something important is happening to or for your machine, you find out *fast*.

- Just like ***Public Domain***, it concentrates on the three 16-bit formats that really matter: the Amiga, the ST and the PC. That means you don't have to plough through heaps and heaps of stuff about Macintoshes, NeXT machines and some insignificant little console released in Japan that's not due here for four years, if it ever makes it at all.

- Just like Public Domain, it features a triple-format Cover Disk every issue. Except that means 780K of valuable programs and the pick of ***Public Domain*** every Thursday, rather than every two months.

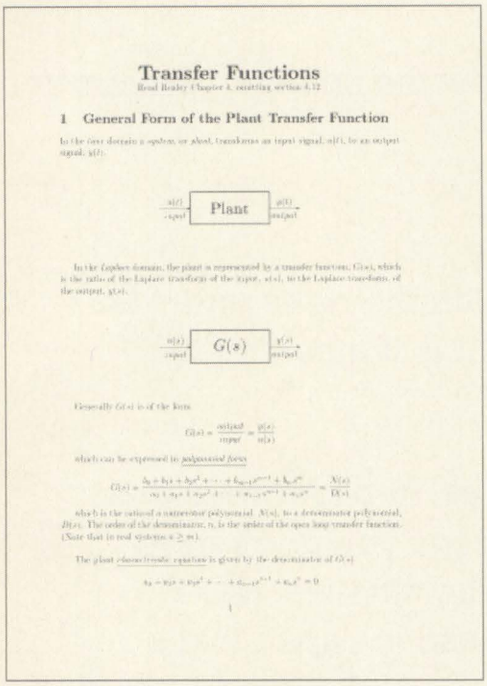
- Furthermore, it costs just £1.50. That's not bad for 35,000 words, all the news you need before anyone else gets it, *plus* a Cover Disk.

To sum up: it's out every Thursday, it's called ***New Computer Express***, it's got a Cover Disk. And it's one heck of a long time until the next issue of ***Public Domain***.

If you can't wait for the next issue of *Public Domain*, give *New Computer Express* a go!

Printing the perfect formula

TeX is unique and it's in the public domain. When it comes to complex typesetting it can beat any other DTP package hands down – even commercial ones costing thousands of pounds. TeX convert Martin Kellet wouldn't lay out a letter to his grey-haired grandmother with anything else and here he explains why...



Transfer Functions

Read Bailey Chapter 4, omitting section 4.12

1 General Form of the Plant Transfer Function

In the time domain a system, or plant, transforms an input signal, $u(t)$, to an output signal, $y(t)$.

In the Laplace domain, the plant is represented by a transfer function, $G(s)$, which is the ratio of the Laplace transform of the input, $u(s)$, to the Laplace transform, of the output, $y(s)$.

Generally $G(s)$ is of the form

$$G(s) = \frac{\text{output}}{\text{input}} = \frac{y(s)}{u(s)}$$

which can be expressed in polynomial form

$$G(s) = \frac{b_0 + b_1 s + b_2 s^2 + \cdots + b_{m-1} s^{m-1} + b_m s^m}{a_0 + a_1 s + a_2 s^2 + \cdots + a_{n-1} s^{n-1} + a_n s^n} = \frac{N(s)}{D(s)}$$

which is the ratio of a numerator polynomial, $N(s)$, to a denominator polynomial, $D(s)$. The order of the denominator, n, is the order of the open loop transfer function. (Note that in real systems $n \geq m$).

The plant characteristic equation is given by the denominator of $G(s)$

$$a_0 + a_1 s + a_2 s^2 + \cdots + a_{n-1} s^{n-1} + a_n s^n = 0$$

1

***TeX* allows you to create page layouts that any normal DTP system, even the ones we use here at *Public Domain*, would have severe problems reproducing.**

Don't be put off by *TeX*'s rather sober description of itself: "A typesetting system intended for the creation of beautiful books – and especially for books containing a lot of mathematics."

This really is a huge understatement.

TeX is, in fact, perfectly at home producing one-page flyers, dinner menus, project reports and any of the other million and one things that people find themselves needing to print, whether they contain mathematics or not. But when it comes to the mathematical stuff, *TeX* is simply in a class of its own.

The name *TeX* needs a little explanation. Those in the know pronounce it *tech*, not *tecks*, since the three letters come from the Greek word *tex* which is the root of modern words such as technology, technicolour and technique.

It's important not to confuse *TeX* with conventional desktop publishing. With an ordinary DTP system the user is largely responsible for the typesetting and layout of the final document. Not many people have formal training in typesetting and the results all too often look like the computer equivalent of a four year being let loose with a packet of crayons.

TeX can almost be described as an expert system that has had the principles of good typesetting programmed in. The user just presents *TeX* with a raw manuscript containing the text of the document plus instructions to the typesetter as to where new paragraphs and sections start, where new chapters begin, what document style is to be used, and so on, and *TeX* does the job of turning this into a ready-for-printing, typeset document.

This is deliberately akin to the old-fashioned manual systems where an author prepares a manuscript and hands it over to a typesetter for final preparation. The user is thus free to concentrate on actually writing their document rather than the aesthetics. The result is a better document, both in the way it reads and appearance.

A recent survey of the papers presented at a technical conference showed that the papers prepared using *TeX* contained, on average, 30 per cent more information each than the others.

A Little History

TeX was developed by Donald Knuth at Stanford University in California. Knuth is something of a guru in computer programming circles and is famous for many books, including the excellent *Art of Computer Programming* series.

Publishing textbooks and technical papers about mathematics and computing fired his interest in typography and typesetting, and he set about developing a system to typeset the finest quality documents by computer, especially addressing the special problems of typesetting mathematics.

The result was *TeX*, and to assure its future he placed it 100 per cent in the public domain and designed it so that whenever a new computer appeared, it could be recompiled quickly and efficiently for the new machine.

"Don't be misled by any advertising for commercial versions of TeX. The PD versions do exactly the same job."

Until home micros developed sufficiently to be able to run *TeX* at a reasonable speed, the main users of of *TeX* were the academic community which had access to mainframe machines. The current generation of home machines now match the power of the old mainframes, so nowadays *TeX* can be used by almost anyone.

In order to protect the name of *TeX* and associated programs such as *Metafont*, Knuth

TeX Glossary

- *TeX* – The computer typesetting system created by Donald Knuth.
- *LaTeX* – A macro package for *TeX* that provides much higher level functions, making it a lot easier to use.
- *AMS-TeX* – Another *TeX* macro package, from the American Mathematical Society. This one's for the really heavy maths and for experts only!
- *Metafont* – This is the companion package to *TeX* which creates all the fonts that *TeX* uses. It often comes bunded with *TeX*. It is only really of any interest if you want to create your own fonts from scratch or if you want to modify the existing ones.
- DVI – This stands for device-independent, and is the output file that *TeX* creates. This file contains all the typesetting information to create the document, and is processed with one or more of the DVI-drivers to produce hard copy or a screen image for previewing.
- WEB – This is the remarkable programming language that Donald Knuth developed to create *TeX* and *Metafont*. WEB is also in the public domain, though there are not as many implementations around as there are for *TeX* and *Metafont*.

assigned the copyright of these to the American Mathematical Society, which nowadays act as the legal guardians of his amazing creations.

Since the job of implementing *TeX* on a new computer requires a fair bit of effort, some people charge for this and this explains the many commercial versions of *TeX* that cost hundreds of pounds. However, there is at least one PD version available for each make of home computer, though, which can be obtained in the usual way for just the costs of the disks.

Don't be misled by any advertising for commercial versions; the PD versions do the same job. They have to – otherwise they are not allowed to call themselves *TeX*.

Using TEX

Preparing a document in *TeX* takes a little getting used to. When you receive the PD disks, you'll get installation instructions and any information relevant to that particular version, but what you won't get is any instructions on how to write a *TeX* document. The reason for this is that the documentation is huge, and is readily available in many of the books on *TeX*.

Because document preparation in *TeX* is quite an involved business, there are several packages around that make *TeX* quite a lot easier to use. The most popular of these is called *LaTeX* and comes bundled with almost all versions of *TeX*.

LaTeX makes document preparation a lot easier by giving you pre-defined styles to work with, but the full power of *TeX* is still available if you find that *LaTeX* doesn't do quite what you want.

Using *TeX* is rather like compiling a program. First you prepare your text as a plain ASCII file using an ordinary editor or word processor. You then process your file with *TeX* to get a DVI (DeVice-Independent) file.

The DVI file then needs to be transformed into either a screen image for previewing, or hard copy. This is the job of the DVI-drivers, and all versions of *TeX* should come with drivers for a variety of printers as well as different screen modes.

This program has scope

Your document file should contain the text, plus instructions to *TeX* to tell it how to do the typesetting. To switch fonts for example, you just insert `\bf` for boldface, `\em` for emphasised (italic) and so on. For example, if you type

```
This line has an {\em emphasised} word
```

you get

This line has an *emphasised* word.

The brackets { and} illustrate one of TeX's most powerful concepts, that of *scope*. This means that the effect of the type change to emphasised is limited to the text inside the braces, and when you come out of them everything returns to normal. This scoping applies to all *TeX* commands and the bracketted area can be as big as you like.

Maths really is the strong point of *TeX*. To produce Einstein's famous equation (or at least the truncated form we are used to seeing), just type

```
E = mc^{2}
```

to get

$E = mc^2$

Something more complicated like

```
z = \sqrt {x^{2} + y^{2} }
```

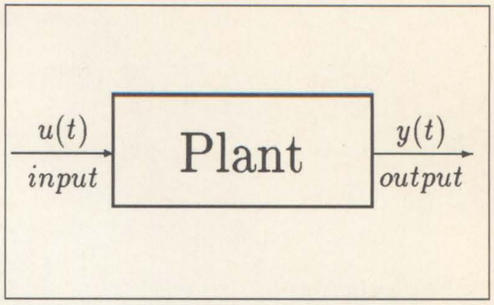
gives you

$$z = \sqrt{x^2 + y^2}$$

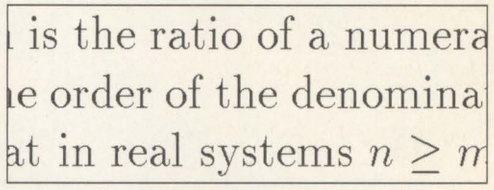
TeX sorts the typesetting out for you, so you can add spaces wherever you like. You can get as complicated as you like with the maths and *TeX* doesn't mind, in fact it almost seems to relish the challenge. Just try typesetting Poisson's integral with any other DTP system:

$$U(r,\theta) = \int_0^{2\pi} \frac{U(\phi)(a^2 - r^2)}{a^2 - 2ar\cos(\theta - \phi) + r^2}$$

Not even the mighty *Quark Xpress*, which we use to layout the this magazine is capable of that! Don't tell anybody, but we cheated – we scanned it in!



***TeX* is even capable of making print-outs from a 9-pin printer look very impressive This was done on an Epson FX.**



***TeX* comes with a PC preview facility which lets you zoom right in to see dot for dot what will come out on your printer ie one pixel on your screen represents one printed-out dot.**

Worth the effort

TeX is a unique system that produces the finest quality documents you could wish for. The faster your machine is, the quicker *TeX* can do it's job. A reasonable amount of disk space is required – the PC version needs at least 5Mb of hard disk space because it contains over 700 fonts.

You'll have to put a little effort into learning the syntax and it's best to get hold of one of the books to help you out. But if you're interested in producing really beautiful documents, and especially if they need any mathematical typesetting, then *TeX* is absolutely unbeatable by any other package, commercial or PD. PD

Support For *TeX*

Books

LaTeX – A Document Preparation System
Written by Leslie Lamport, the guy who developed *LaTeX*, this has a light tutorial style and is the only book most *TeX* users ever really need.
Leslie Lamport. Published by Addison-Wesley. 1985, ISBN 0 201 15790. £24.95.

The TEX Book
The definitive reference for *TeX*. Hard going, but with lots of exercises and tests to make sure you understand everything.
Donald Knuth. Published by Addison-Wesley. 1984, ISBN 0 201 13448 9. £24.95.

Introduction To TEX
This book is an answer to those critics of The *TeX* book who say that there should be an easier book for beginners. It does the job quite well and has better laid out reference sections.
Jost Kreiger & Norbert Schwarz. Published by Addison-Wesley. 1990, ISBN 0 201 51141. £21.95.

The MetafontBook
Metafont is the *TeX* way of creating beautiful typefaces. Like *TeX*, it's quite involved and the book reflects this.
Donald Knuth. Published by Addison-Wesley. 1986, ISBN 0 201 13444 6. £19.95.

Proceeds from the sale of these books are donated to the *TeX* User Group.

Support Groups

TeX User Group (TUG).
This is a huge American organisation devoted to the future development of *TeX* and support for *TeX* and all the add-on macro packages and fonts. Ordinary membership costs $45 per year, $35 for students. The most economical way of joining the TUG, however, is to do it with a joint membership of the UK *TeX* User Group.

UK *TeX* User Group (UKTUG).
Membership costs a very reasonable £15 per year (50 per cent discount for students). For more details, contact:
Chris Rowley, Secretary UK *TeX* Users' Group, Parsifal College,
Open University, 527 Finchley Road, London NW3

Where To Get A Copy

Not many PD libraries stock *TeX* since it's fairly specialised and usually needs some user support, but two who do are:

- For IBM PC's and compatibles:
Eigen PD Software, PO Box 722, Swindon, Wiltshire SN2 2HE. ☎ (0793) 611270

- For the Atari ST:
South-West Software Library, PO Box 562, Wimbourne, Dorset, BH21 2YD

The next time you're confronted mid-magazine by a quarter page ad offering enough PD to choke a donkey and all for the price of a stamp, maybe it would be wise to think twice. Jerry Glenwright asks whether the public domain really is the incredible bargain it seems...

Commercially Viable?

There's just one anomalous fly in the public domain ointment. If the stuff's any good, why on earth is it free? After all, programmers who've pored over reams of bugged code until the early hours, lit only by the cranky green phosphor glow of a hot monitor would have to be one coupon short of a toaster to give the results away for free, right?

And if the free stuff is any good, why does anyone bother to buy the invariably incredibly expensive commercial products? What's the point in doling out the dosh for a spreadsheet or a game when there's a comprehensive collection of funky PD out there in Freesville just waitin' to be picked up off the pavements?

All that glitters...

Computer users break into two groups. There are those who look a gift disk in the write-protect notch – the people who think that free software must translate as lousy software. Then there are those who, presented with a public domain catalogue, order so much of the stuff that the Post Office has to hire Schwarzenegger lookalikes to carry it to their door!

Unfortunately, the pot of gold at the end of the PD rainbow isn't always what it seems. A dozen disks into the fray and the potential PD enthusiasts are springing their cash stash from the teapot under the mattress and bunging it into the sweaty palms of dubious market stall holders in exchange for almost-affordable grey-imports versions of their favourite applications and software.

PD failed them, not because it wasn't good enough, not because they didn't get exactly what they asked for, but because what they asked for didn't meet with a definition of their needs. Maybe it pays to think before sticking a hand into the seemingly bottomless freebie bran tub...

The result is that PD libraries lose otherwise valued customers, and the barrow-boys rub their collective hands and swollen money belts with glee. All this when, with a little thought, those on the receiving end of PD could have been part of a story with a very happy ending.

But why free?

PD's been around for a long time and there's a wealth of the stuff out there. Right across the alphabet from adventure and arcade games to word processors and X, Y and ZMODEM utilities and whole lot more in between.

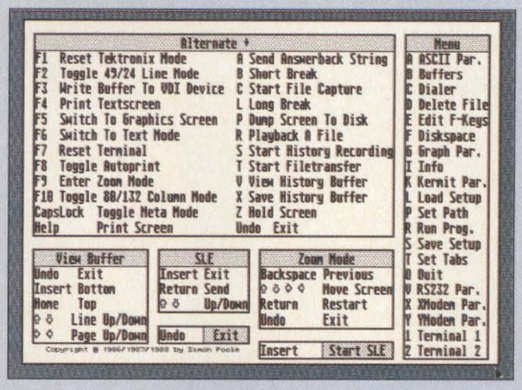
If you want it, the chances are someone else does too, and that someone has written it and put it in the public domain. Some of it's so awful it would put a house brick to sleep, but an awful lot is so good that it becomes almost a standard, a benchmark by which other programs, including commercial offerings, are measured. Why is it given away free then?

Well, the public domain is a great testing ground

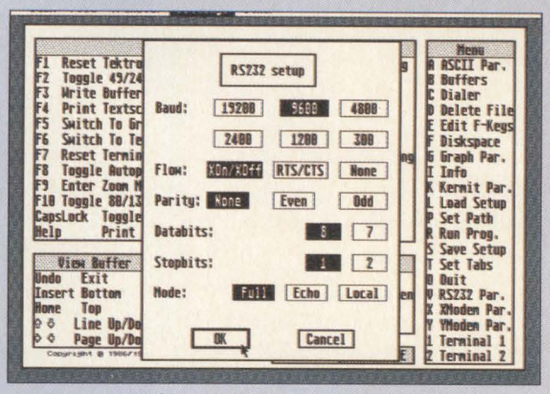
Worth a fortune...Worth a fortune...Worth a fortune...Worth a fortune...Worth a fortune...Worth a for

Often the first reaction to the mention of public domain goes something like: "...yeah, yeah, obscure utilities and propeller-head programming tools."

Think like that and you're gonna miss out on an awful lot of honest, everyday computing fun. What's more, you'll also miss out on some rattling good applications and utilities software which would cost a fortune if they were ever marketed commercially. Let's take a closer look at a few of these programs...



Uniterm: Comprehensive on-screen help ensures that there's never a time when you don't know what to do next!



Complete RS232 options mean that *Uniterm* can access all public services and perform machine-to-machine file transfers

Free communication

Comms is a favourite area for PD programmers. Indeed, many new initiates to life in the free lane believe that obscure comms utilities are probably all that's available – but how wrong they are...

Uniterm is one of the most comprehensive, easy to use, powerful, efficient and fun communications programs available for the ST bar none!

Constantly updated, revised and improved, *Uniterm* features macros, telephone directories, breath-taking terminal emulation facilities, Hayes and non-standard support, intuitive mouse, menu and keyboard-shortcut control and much, much more. You can even multitask your ST, running *Uniterm* and other standard ST programs at the same time. And there's on-line help and a manual that leaves many commercial rivals dead in the ether.

● For a full run down of what the public domain has to offer the comms enthusiast turn to page 38.

Animation made simple

Ani ST is one of those brilliantly simple bits of software that everyone agrees is a pleasure to use and which produces dazzling results. The program performs a little trick known in the cartooning industry as 'tweening'.

If you've ever watched an episode of *Tom and Jerry* and seen Tom get smashed in the face with a frying pan or some other household implement, you've already seen an example of tweening. Some guy sits down at a drawing board and produces the first and last drawings of a sequence – in this case, Tom with his normal face, and Tom with his face shaped like a frying pan. Then another guy, the tweener, draws all the frames in between – monotonous and mind-numbingly boring, right? The poor tweener never gets to produce an original drawing, but simply fills in the gaps in someone else's work.

Well, such is life for the apprentice cartooner, but ST owners interested in animation have got it easy. A couple of years ago, Jim Kent, the author of *Ani ST*, decided that the arduous task of tweening was ideally suited to his silicon

Ani's friendly front-end. Simply click an icon to 'tween', load an existing sequence or watch a cartoon. It really is a unique program.

Ani in action. The fish swims from left to right across the screen and the aquatic plants sway gently in the water!

for ideas. A huge distribution network which anyone can take advantage of and with little or no outlay. Programmers get to try out their ideas without the hassle of interesting software houses which often can't see beyond their next fast buck. They can be sure that any feedback about their work, although slow in coming, is almost certain to be brutally honest, because if the recipients of the software haven't made a financial commitment to it, then it's a lot easier to evaluate clearly.

No-one has anything to lose by not hyping the stuff because no-one's making any profit, so the PD scene is a lot more honest all round than the world where code means cash.

It's also the perfect way to beta-test software. If you've been using a word processor for free for the last year and you have discovered a few niggly little, or even whopping great, bugs in it, well, what the hell? Report them to the programmer and pat yourself on the back. It was better than blowing the lion's share of a hundred quid on the commercial equivalent which has fewer features and one or two little nasties all of its own.

Programming for the public domain is valuable practice too. Programmers don't get employed on the strength of their RAM memory quotients – they have to prove that they're capable of coming up with the code in order to interest potential backers. Little Johnny gets a new assembler and yet another *Space Invaders* clone rolls off the electronic production line. No-one wants to buy, but programming the game was good practice and now they've got something to show employers. Johnny gets the kudos, the software house gets this talented young programmer and you get the goodies!

> *"Some applications go on to become shareware; some make it to full-blown applications software with price tags measured in the hundreds."*

Many of today's popular commercial software packages have their origins in the public domain in one way or another. Some of the lesser-known applications go on to become shareware, some make it to full-blown, marketed applications software with price tags measured in the hundreds, but still available in earlier incarnations for free. This gives those who like the look of the software, but aren't sure whether it meets their needs, a chance to try before they buy.

So for most programmers, the lure of free distribution, honest feedback and valuable programming practice leads them up the public domain pathway. And, believe it or not, there really are some code-wranglers who invest hundreds of hours in writing complex applications just to give it all away free!

Coding's simply a hobby, and these people get a considerable buzz out of knowing that there may

a fortune...Worth a fortune...Worth a fortune...Worth a fortune...Worth a fortune...Worth a fortune...Wort

servant the ST. He set about the task in a workmanlike way, and within months was marketing a really useful bit of software.

Aegis Animator, as the program was first known, was available for the Amiga and ST, and you'd have had to seriously consider selling your first-born in order to fund the purchase price.

Jim's a good guy, though, and following a little contretemps with Aegis, the program's distributor, our man Kent decided to claim back the rights to his creation, rename it, and bung it in the public domain – big-hearted geek that he is.

Today, you can wrap a disk drive around the coveted piece of software for less than the price of the packaging of the original release! And not only did the nice Mr Kent give away his stuff for free, he fixed an OS bug that was screwing up everyone's favourite extension (tongue firmly in cheek...) GDOS. Hurrah!

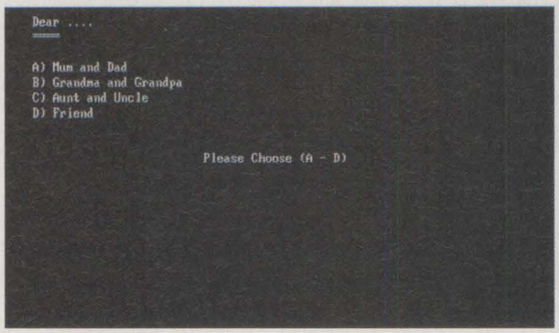
Painless letter writing

Everyone knows that IBM PCs and compatibles are the workhouses of the computer world, right? Day in, day out they diligently perform the most mundane of tasks such as computing spreadsheet formulae and playing CGA-based versions of Amiga and ST arcade games!

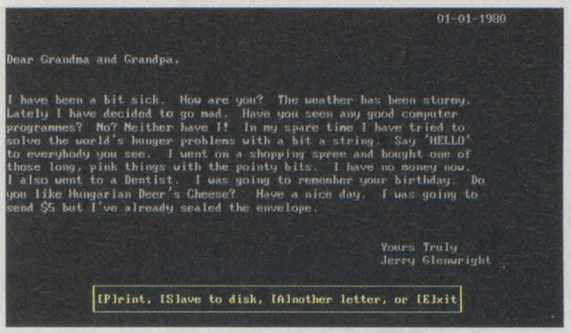
So why not take this silicon slave-driving one step further and get the PC to actually think for you too? No longer need you suffer the agonising steps associated with writing a begging letter to your bank manager or a plea for clemency to the traffic warden's department, the PC does it all for you!

Lazy Letter Writer, by antipodean David Wright, is a frolicsome piece of nonsense designed to relieve those tedious moments of torture during a day of serious computing. All you have to do to produce the perfect letter is to hack in a few choice keywords. Then simply sit back and watch the fun.

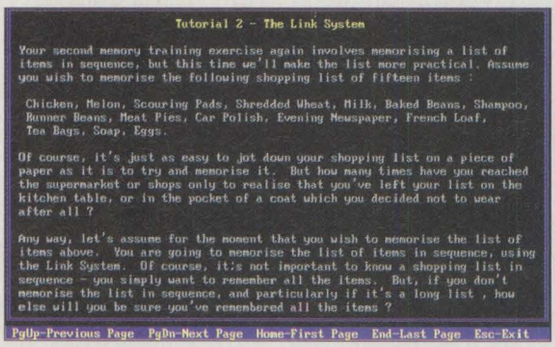
By using tried and tested algorithms devised by people who could pass for Einstein on a dark night, the humorous Mr Wright has constructed a program which writes those monstrous missives for you!



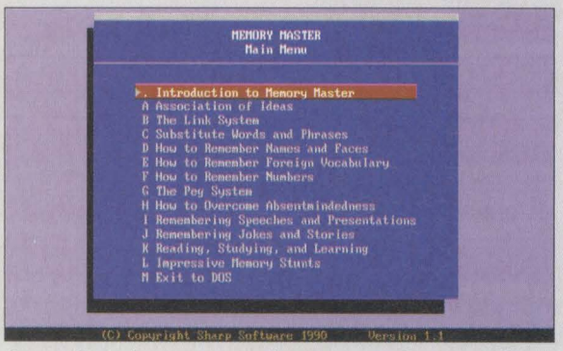
Lazy Letter Writer is the kind of program which at some point in all our lives we've wished we had. It makes writing boring letters so much simpler through the use of a series of options.



The finished masterpiece – the perfect literary missive. It keeps the old folks happy because it says all the right things, and you've hardly had to put any effort into writing it.



Use *Memory Master* and you'll never forget your mum's birthday again. The program teaches you how to improve your memory by a process called linking, and it explains the theory in detail.



Memory Master has a vast range of options catering for everyone from the most feeble minded to clever dicks who want to learn a few party tricks to impress their friends.

be thousands of honest, everyday computer users indebted to them and their software.

Proof of the pudding...

So that's why programmers are happy to give their stuff away, but is it any good? Surely they only give the lousy stuff away and sell the rest? Maybe shareware is the best 'free' software and the truly free stuff should be avoided?

Want the short answer? No. On all counts. Remember the coders who give it away free for kicks? These guys have massive reputations made on the back of PD programs. They care about what you, the great unwashed, think of their work and they constantly update and debug it to keep it running and take advantage of hardware developments and users' desires. And it doesn't matter whether the code is freeware or shareware, both fields have their good and bad programs, it's just that those responsible for shareware feel that a voluntary contribution for a program you're already using and enjoying is a whole lot fairer than a large payment up-front at the computer store for software you know nothing about and may not need or use fully.

There are programs available in every definable software category and in each, there'll be at least one or two which easily stand up to and sometimes far exceed the specifications of a commercial rival. Word processors, spreadsheets, databases, comms packages, emulators and some of the best classic games covers around. There may not be many rivals to the latest mega-buck coin-op conversions, but you'll find some fantastic cover numbers, the software of yesteryear rewritten to take advantage of the silicon of the 90s. It's fun, useful and free, and it's definitely worth having!

Under the microscope

True, there are times when only an off-the-shelf application will do. Some of the best CAD and drafting programs for example, can't be found anywhere outside a five hundred quid purchase price and you don't get much of a desktop publishing package for under a pound. But examine what features you actually need and you'll discover that the ability to calculate annual mean potted-plant growth rates is not something you're going to use very often when producing a stamp club magazine or home-published rival to *Viz*.

And look at all those arcade corkers which line software store shelves every month. Glossy, bright and brash for sure, but at £25 a time, what would you expect? Packaging and promises do not a good game make. How many times have you saved up your hard earned cash, breathless with anticipation for the day when you could afford the latest from the Slipped Disk Sisters only to find that after fifteen minutes of play, the only person getting excited is their bank manager!

Your wallet is scuppered and the game's been sent to the bottom of the toy box.

Now I'm not saying that a quick flick through a PD catalogue is going to turn up games to rival the likes of *Kick Off*, *Mario* and the like, but there are some excellent blasts from the past. Back in the days when hip kids quoted *Galaxians* high scores, home-

a fortune...Worth a fortune...Worth a fortune...Worth a fortune...

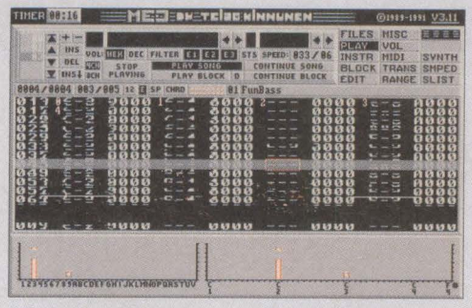
It's all in the mind

A few years ago, between the advertisements for the jumbo-sized slippers, pile ointments and incontinence pants, the broadsheet Sundays used to carry ads featuring a serious-looking middle-executive type who found it jolly difficult to put names to faces, remember important facts during board meetings, differentiate between the gardener and his wife, and other unfortunate memory-based capers, all of which led to extreme discomfort and a tendency to slip further down the career ladder.

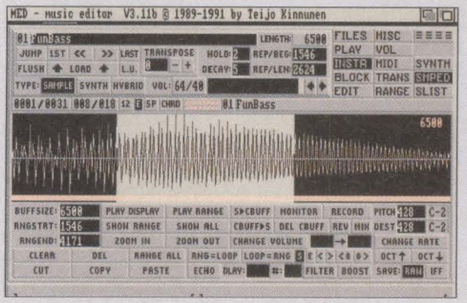
Hapless punters who felt themselves in the same position could, for a (ahem) nominal sum, undergo a course of memory improving tutorials designed to uplift their lives.

Well now, courtesy of friendly old shareware programmer Sharp Software (a fiver registers your copy...), there's *Memory Master*, the almost-free software with the big recall quotient!

By following the interesting and often humorous on-screen lessons, *MM* guarantees to improve your powers of recall, ensuring that never again will you be passed over for the seat by the radiator and the key to the executive washroom...



Why bother a full-priced music creation package like Soundtracker when you've got the arguably superior *MED* waiting in the public domain for next to nothing.



The range of features in *MED* is simply astounding, and the program's author is continually updating it so that it remains fresh and essential to all Amiga musicians.

Sounds good

The Amiga is a noted sound graphics machine and there's a vast range of stuff in the public domain to take full advantage of its superior capabilities.

Such a program is *MED*, a PD clone of popular Amiga music package, *SoundTracker*. Thing is, *MED* is infinitely better than its commercial rival.

MED will load and manipulate *SoundTracker* and other popular sound file formats as well as IFF files and raw samples. The program comes with comprehensive docs designed to get even the freshest novice bopping along with his or her creations after an hour or two. It's virtually uncrashable, has a simple interface and runs on a standard movable screen from Workbench.

Teijo Kinnunen, *MED*'s author, has a policy of constant update and revision, so the program remains one of the best music applications available. It's on a Fish disk no. 255 now!

● For an essential step by step guide to making the most of *MED* look no further than page 35.

computer renditions of the coin-ops consisted of the kind of blocky sprites that'd be hard-pressed to fool Blind Pew. Nowadays however, 16 bits of silicon equates to the best space-side thrash you're ever going to play, and when converted to the Amiga, ST and PC, tired favourites such as *Frogger*, *Kong* and *PacMan* take on a thrill quotient that has to be experienced to be believed. Make no mistake, get 20 levels into *Kong* and your fingers have to be prised off the keyboard – you'd kill before missing a chance at the next bonus round.

And the fun doesn't stop at games software. Back in the days when word processors were still regarded as the saviour of the western business world, the required hardware filled a room and needed twenty dour young men and women to keep it running. Today, the hardware's ten a penny but, inexplicably, the word processing software works will set you back a hundred pounds or so – some packages maybe more, some a little less, but it still amounts to a lot of saved allowances.

But with the gradual devolution of programming concepts, serious applications such as word processors, databases and the like are firmly in the hands of anyone who cares to program them. The result is software which could only be dreamed about by the young-and-bearded 20 years ago, but which today (yes I said it already, but I want you to take it on board, OK?) is available free, gratis and for absolutely nuthin'.

Free also equates to diverse too. Financial considerations mean that most software houses program researched projects for defined markets. Fine. Where would we be if Anco hadn't come up with *Kick Off*, Gadgets By Small with *Spectre GCR* and Microsoft with *Word*? All these products have a place and a price.

For PD programmers, however, there are no constraints. They write to fulfil needs sure enough, but their own! No money changes hands so there's no-one to please. If the populace picks up on some program or other, well, that's fine too.

The result is that some of the stuff in the public domain just can't be found anywhere else, programs based on such diverse subjects genealogy, biorhythms, the new testament, knitting pattern generators, menu planners, seed cataloguers, bird fancier's breeding quantifiers, 8-bit emulators. It's all there. Maybe only one in a thousand will want it, but if you're that one, you'll thank your lucky stars!

Design for living...

So, should you stop buying commercial products altogether? Well you could; there's PD software enough for a hundred years of computerish hi-jinks, but you'll miss out on an awful lot of action. If you like to 'play' with computers, you're probably also interested in future developments. Silicon is all about leading edge technology and developments of tomorrow and the same argument is true of the software world. Stop buying at the cutting edge and you'll be left way, way behind.

On the hand, and as we've outlined above, there's just so many goodies, free and dirt cheap, available from public domain and shareware libraries that not to acquire at least some of it means that you're cutting off a vital and valuable part of your hobby. Even if that machine of yours is used only for business or serious purposes, it's imperative that you consider what the public domain has to offer. Not to do so means that you'll miss out on an awful lot of what could make your computing life so much easier and so much more of a pleasure.

So. Here's what to do: define your needs. Let 'define' be your watchword against all those tediously pointless 'mine's bigger than yours' arguments. If all you need is a ZX81 and a handful of PD programs, go for it. If your Amiga and freeware word processor does all you need, fine. If you need a '486 and Microsoft's latest bank balance basher, that's fine too. Decide what you want to do, what you need to do it with and choose a combination of quality hardware, a commercial package or two and all the free software that fits your bill. You won't be disappointed! PD

The Establishment speaks out

Free software? You might think that even thinking F-words like 'free' around some of the software houses would result in apoplectic young company executives putting out on contracts on your life!

In fact, most of the software houses we called felt that public domain was simply another aspect of computing and that they didn't feel it was a threat to their own, marketed products.

And if the truth be know, they're right of course. Software houses invest a lot of time, effort and hard gelt in the production of some breath-takingly good bits of code and it's right that they should want a return on their efforts. They employ a lot of people too – maybe you, some day – and that's also pretty good.

Public domain software is interesting, exciting and fun to explore. There's heaps of it and it's a great part of computing at large and thankfully, there's room for both.

From the makers of Pub
Your guide to a new PC

Your 10 step guide to a magazine dream

1 Dream of a magazine that has page after fact-packed page full of stunning reviews and authori tative advice solely dedicated to all leisure activities on your PC.

2 Imagine that it stylishly covers games, graphics, music, shareware – everything, in fact, other than serious business stuff.

3 Hope that it has practical tutorials and reliable buyers' guides written by a host of acknowledged PC experts.

4 Fantasize about a magazine combining the rigour and professionalism of *PC Plus* and the style and editorial philosophy of *Amiga Format*. If you could only have the art editor of the former working with the erstwhile editor of the latter...

5 What if there could be a magazine that wrote about games in an adult, but still exciting manner? And what if it didn't restrict itself to games, but covered the full panoply of PC leisure activities?

6 Now think of the benefits of having the leisure computing market's most successful editor Bob Wade leading an unrivalled, hand-picked team. Then add the full editorial and art resources of Europe's most successful news-stand computer magazine company, Future Publishing.

7 How about if all the business and serious applications of your PC were left to *PC Plus* and *PC Answers*? Their domain is the useful: you're also interested in the fun and the desirable...

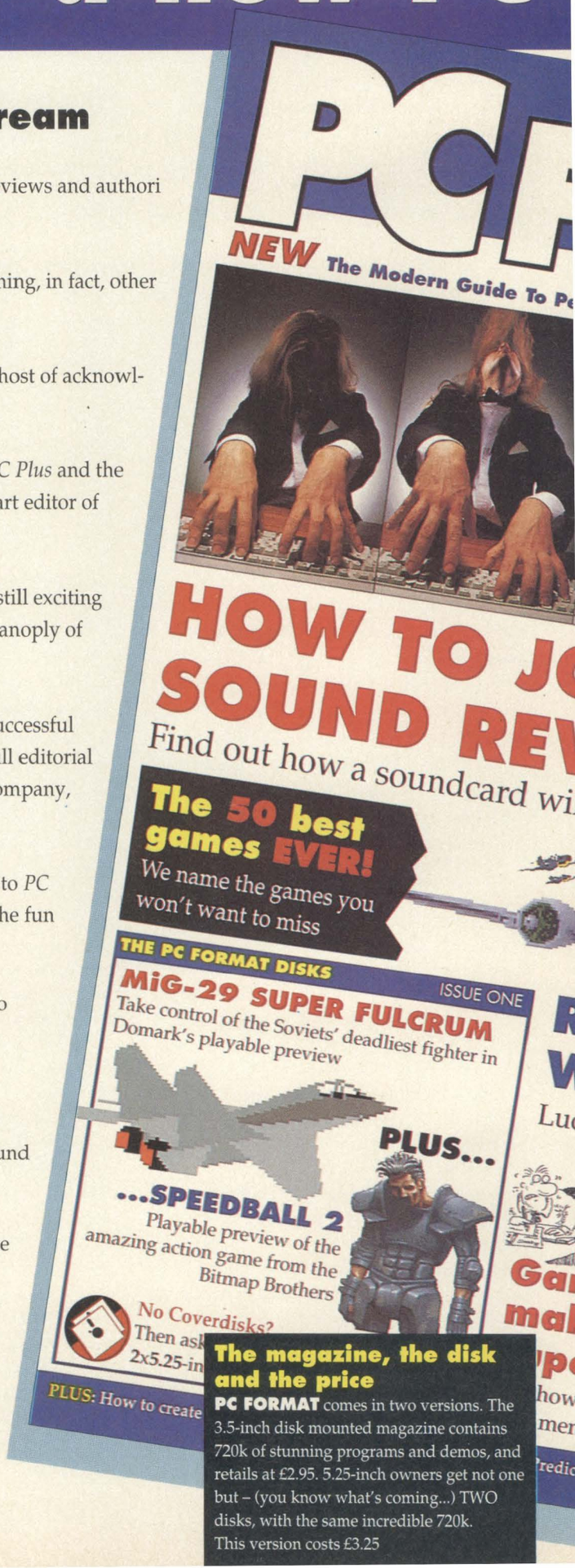
8 Then ponder the glories of program-packed cover disks: one 3.5-inch or two 5.25-inch. Each would contain irresistible games demos enabling you to try before you buy.

9 Oh, and what about a mail order section based entirely on editorial recommendations? Easy, direct credit card purchases save the faff of traipsing round computer stores.

10 And just think if it could have a comprehensive reviews listing of all the major leisure software...

Enough. Dream no more. At last, **PC FORMAT** is a dream coming true all over the country from September 26th and continuing on every fourth Thursday in the month afterwards.

Don't miss the beginning of a great adventure...



The magazine, the disk and the price

PC FORMAT comes in two versions. The 3.5-inch disk mounted magazine contains 720k of stunning programs and demos, and retails at £2.95. 5.25-inch owners get not one but – (you know what's coming...) TWO disks, with the same incredible 720k. This version costs £3.25

lic Domain. world starts here...

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- Subscribe (see below for further details)
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UK newstrade distribution: Future Publishing 0225 442244. Rest of the world: Comag 0895 444055.

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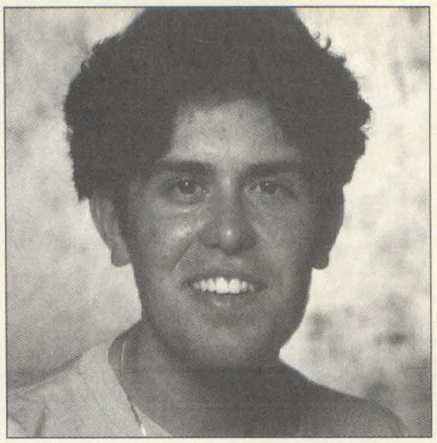
Home & Education



Whether you want to gaze into the future, learn a new language or encourage the kids to learn while they're having fun, the public domain is the answer to your problems. Dave Golder casts his eye over a pot pourri of weird and wonderful programs that probably would not have seen the light of day had it not been for the public domain...

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Axle Tarot

Amiga • 17 Bit Software, PO Box 97, Wakefield WF1 1XX
☎ 0924 366982

Axle Tarot is a bit like a Porsche with the engine of a Robin Reliant. You have to admit it looks damned impressive. If it was reviewed in the demo section, Maff might have had a few kind words to say about its atmospheric music and glossy graphics. The intro sequence is, in fact, the best bit of the whole program and leads you to believe that you're in for something really special, particularly as it comes on two disks. (Pity it won't let you use two drives.)

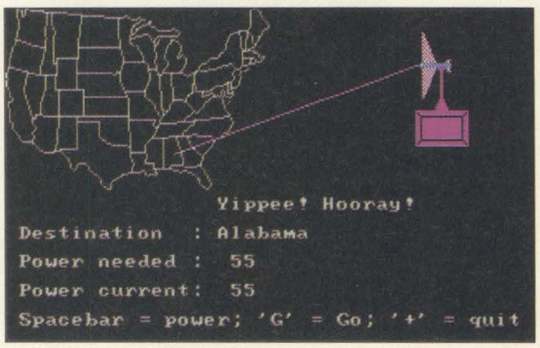
Unfortunately, *Axle Tarot* has absolutely nothing to do with tarot. In fact, has nothing to do with casting predictions at all. All it really does is list the various attributes of the 12 signs of the Zodiac.

Just click on your star sign on the colourful, intricate main menu page, and you get two more colourful, intricate pages of wiffle about your birth sign characteristics. And that's it.

It may still be worth getting hold of, though, purely for the music that accompanies the intro sequence!

AMIGA 68%

The main menu page of *Axle Tarot* looks impressive. The intro that preceded it was impressive. The astrology program that follows it, however, is not. Nice graphics, shame about the rest.



Don't worry. The USA is not being invaded by a race of mutant satellite dishes. This is how the post is delivered in *Brandon's Lunchbox*.

Brandon's Lunchbox

PC • Advantage, 56 Bath Road, Cheltenham, Glos GL53 7HJ
☎ 0242 224340
Disk 1/2

A niggling question keeps coming to mind as you play the simple maths and spelling games on this disk: who's Brandon? Could he be, perhaps, the bloke who asks such dodgy questions as: "I've got some objects. Can you guess how many I've got?" and "I've got some doors. Can you guess what's behind them?" Any moment you expect him to say, "I've got some sweeties. Do you want to come and see my etchings?"

The games on this compilation are all very basic and aimed squarely at the under-fives. There are three main menu screens, each of which take the form of a lunchbox. The first apparently belongs to the mysterious Brandon, and is filled with the letters A to F, for those with an appetite for word and number puzzles. The second is called *USA Box*, and contains four games (well actually only two, but more on that later) which help teach the geography of the United States of America, plus simple times tables.

The third is *Superbox*. All this basically does is collect all the games from the other two boxes into one single menu. This lunchbox does not appear to be abundant and appetising as it first looks.

A couple of the games, however, are not at all bad. There's a memory puzzle in which you have to remember what blocky low-resolution objects are hidden behind a set of ten doors. These same blocky objects crop up again in a simple counting game, in which you have to type in the number of objects you can see.

Another game displays a letter on-screen and you have to type in the corresponding letter on the keyboard. Get nine right and you get a surprise – two pigs (I think they're pigs anyway –

we're talking really blocky here) dancing to the theme of *Loony Toons*. Then there's the maths game, which involves little more than simple addition, represented in the traditional numeric format – no raspberries or sweets to act as encouragement. This has an even better surprise – *four* pigs dancing to the theme of *Loony Toons*.

The USA games are the best of the bunch and certainly envolve the best graphics, which isn't saying much. A satellite disk at the top of the screen has to beam parcels – don't stop to ask how – to various states on an accompanying map. It needs power cells to do so and you supply these by doing your two-times and five-times tables. Get the right answer and the parcel is safely delivered (or is that beamed to?) the destination state. Get it wrong and either the parcel is left undelivered or the satellite dish blows up (rather unconvincingly).

The menu lists four USA games, but *USA 1* seems to be the same as *USA 3* (both two-times tables) and the same goes for *USA 2* and *USA 4* ((five-times tables). Strange.

Brandon's Lunchbox might keep a few very young kids enthralled for half an hour or so, but really most of the games on this disk suffer from the *Computer Battleships* syndrome – they are so much less bother and are just as much fun to play simply using a pen and paper.

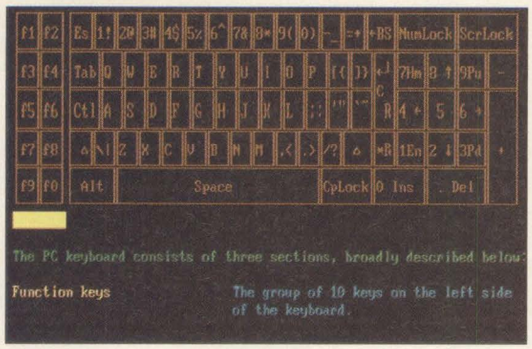
PC 65%

IBM Tutor

PC • Disk LE1 • Alpha Computing 32, Meadow Drive, Halifax, West Yorkshire HX3 5JZ

If you're a PC-phobic, then this disk is designed to help you overcome your deepest fears.

It is a largely text-based program with a few clear, helpful graphics and a tad of interaction, which helps to introduce the non-IBM-literate to the daunting world of the PC and DOS. It also has a number of sections on the history of computing, which are much more interesting and entertaining than most of the text books I've read on similar subjects.



Text books on PCs can be dreadfully dull, so why not try *PC Tutor*? Te text might be just as dull, but at least it's in pretty colours.

The disk takes you right from the very basics of the PC – how the keyboard is laid out and what certain keys do – to some pretty complicated stuff, such as DOS commands and batch files.

Interaction is limited to a few question and answer sessions, which is a bit of a shame. A few exercises, brightened up with some sound effects and whizzy graphics, might have made the program a bit more appealing to its target audience.

The text, though, is very clear and informative, though you have to excuse some dreadful attempts at humour – look out, those crap 'Nibbles and Bytes' jokes are back! But whoever laid the thing out had no idea of colour. 'Explosion in a paint factory' is an understatement. At times, the clashing hues almost make the whole thing unreadable. Sunglasses are recommended

PC 72%

Melissa's Music Flashcards

PC • Advantage, 56 Bath Road, Cheltenham, Glos GL53 ☎ 0242 224340

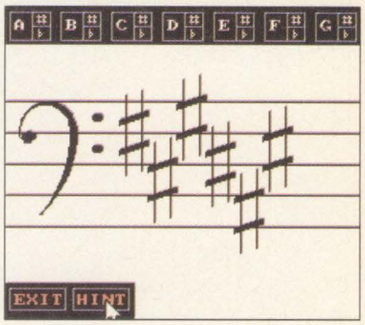
The documentation for *Melissa's Music Flashcards* claims that it was written for a seven-year-old, but you'd have to be a pretty musically literate seven-year-old to use this program. As someone who finds chopsticks on the piano a bit of a task, I must admit that most of it was beyond me.

But, for those who do know their treble clefs from their demi-semi-quavers, it is an excellently presented program and a great way to learn and remember where notes are on the piano keyboard.

The screen shows a stave with a note positioned on it. You simply have to name the note. Did I say simple? Well, this get a bit complicated when flat and sharp notes and other tricky bits of musical notation are thrown in.

Even so, well worth an investment for the musically gifted.

PC 74%



***Melissa's Musical Flashcards* – well I don't know what these notes are so I need a hint.**

Shipwreck

ST • Game 83 • Solent Software, 53 Rufus Gardens, Totton, Hants SO4 3TA ☎ 0703 868882

You have just been shipwrecked, and your only hope of returning to civilisation depends not on your athletic abilities, powers of endurance and your willingness to eat fried snake, but on your mathematical prowess. It was never like this in Long John Silver's day!

The game is split into four sections. In the first you have to reach the beach from the shipwreck by answering addition sums correctly. Get them right and your lifeboat advances a few feet. Get one wrong and a shark starts circling. Two wrong, and you're fish food.

The other sections follow a similar formula. In the second you walk along the beach answering subtraction questions, the third concerns a chairlift ride powered by correctly-answered multiplication sums and the fourth has you skiing down a mountain while working out division puzzles. In each, if you answer two questions wrong in a row you end up meeting some sticky end.

The game is very simple and seems to be aimed at the seven- to ten-years age group. However, there are five levels of difficulty, the hardest of which would be difficult for many adults: it includes the 15 times table! Still, the lower levels are much more sensible – 2x2, 4+6, 8-2, etc and provide a fun and entertaining way of learning maths.

However, it's a bit slow, especially during the chairlift sequence, and I can imagine many kids becoming rapidly bored with it, the graphics being of the blocky standard that programmers only seem to get away with in childrens' games. The most unfortunate thing, though, is the game is at its most exciting when you get the questions wrong. Watching all the disasters that happen to you for making 2+2=5 are much more fun than, say, shuffling aimlessly along the beach.

In section one of *Shipwreck* you have to row from the sunken ship to the island. But you can only do so if you answer the maths questions correct. The other sections follow a similar

ST 68%

cont. on p112

cont. from p111

Diet Analysis

PC • HOM 049 •
Fantasia Shareware
PO Box 1231, Clutton,
Bristol, Avon
☎ 0761 53716

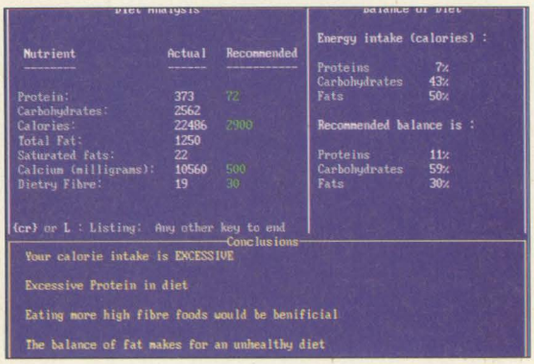
It's wrong, its got to be! I mean OK, perhaps I do have ten pints of ginger beer a day, eat two roast meals and single-handedly dispose of the European crisp mountain on a regular basis, but this program is trying to tell me that my calorie intake is excessive! But then again...

If you want to get the most accurate results out of *Diet Analysis*, you have to be pretty clued up about what and how much you eat every day. During the initial sequence, it requires you to fill it in with some detailed information about your eating habits. And how many people know off-hand how much bread they eat a day, or how many grams of cereal they pour into their breakfast bowls?

Still, if you are honest enough with yourself and enter the data as accurately as possible, you are rewarded with a comprehensive, often frightening list of information about where your diet's going all wrong (well, mine was frightening, anyway). It tells you what proportion of protein, fat and carbohydrate you are eating and what they should be, what your daily calorie intake is and which areas you should pay most attention to rectifying.

Diet Analysis is very friendly to use, even if some of the figures and tables it presents you with are a little daunting at times. One of the major plus points is that you are not stuck with the food that it has listed in its memory; there is a customisation feature. So if you tend to pig out on baked bean and marmite sandwiches occasionally, and you know the calorific value, then you can add it to the list.

Must be going now. I've got to take my scales to be repaired.



Oh my God! This is the conclusion that *Diet Analysis* made of my daily intake. Am I going to live to write for the next issue?

PC 73%

Poetry Generator

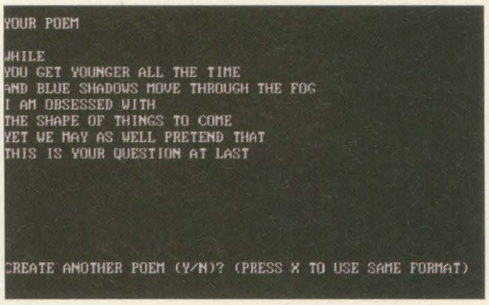
PC • HOM-044 •
Fantasia Shareware
PO Box 1231, Clutton, Bristol
Avon ☎ 0761 53716

The title just about sums it up really. That's all it does. Generates poems. And pretty odd most of them are too.

Apparently it has 15,000 words to choose from, but it always seems to choose the most ridiculous ones. Most of the poems simply don't seem to make sense – perhaps they're modern or something.

Actually, the program is quite fun, if a bit limited. Version two, which is floating around somewhere in the public domain, sounds much better – you can personalise poems by asking the program to include names and colours in them, and it has a print out option – surely a major omission from version one.

Poetry Generator has to be run from the hard disk, and I think it would actually work quite well as a memory-resident program, so you can call up a poem half-way through doing your accounts, for example. Any programming bod want to take it on?



Keats it ain't, but the ditties that *Poetry Generator* comes up with are... well... let's just say they rhyme... sometimes.

PC 60%

Amy's First Primer

PC • Advantage Shareware
56 Bath Road, Cheltenham,
Glos GL53 7HJ
☎ 0242 224340

Bit of a bargain this one. Six decent games designed for four- to eight-year-olds, all accessed from a colourful, attractively designed main menu. According to the text document, they were all written by the author for a little girl called Amy, hence the name.

ABC Song gets things off to a bit of a slow start, but don't let that put you off. It features that old *Sesame Street* classic again. There's no interaction, it just plays the song over and over again. But there are some pretty pictures to make things a bit more bearable.

And talking of bearable, next up is *Beary Fun Letters* (groan). A object appears in the centre of the screen and you have to type in the initial letter of that object. For instance, if an apple appears you type in [A]. Get the letter right and a friendly bear pops up at the edge of the screen. This carries on until the whole border of the screen is chocker with friendly bears. Unfortunately, your prize for doing so is another rendition of the *ABC* song.

Bunny Letters concerns linking initial letters on the left of the screen with objects on the right. You do this by controlling a bunny with your mouse; you simply guide your lupine friend from a letter to the correct object.

Beary Fun Counting is similar to the the letters game, but this time you have to count the objects that appear on-screen.

Help the Froggy is a maze game in which you guide a frog through a maze with the cursor keys to the strains, and I do mean strains – this is the PC we're talking about – of 'A Froggy Went A-Courtin''. The number of moves are counted and used as score so you can try to improve with subsequent attempts. The frog is cute and there's a neat bit of fly-swallowing animation at the completion of each maze.

Finally, in *Load The Truck* you have to, would you believe, load a truck? A pattern of four coloured shapes is displayed at the top of the screen, rows of similar shapes are lined up to the right-hand side and an empty lorry waits at the bottom.

Pick up shapes from the stockpiles and place them in the right order on the lorry using a mouse-guided fork-lift truck. Bold, bright graphics and surprisingly lorry-like sound effects make this the best of the bunch.

While none of the games are exactly earth-shattering, all the elements of *Amy's First Primer* – graphics, sound, ease of use and playability – come together to make it a very entertaining and worthwhile purchase.

There are six very colourful games available on *Amy' s First Primer*, and five of them are pretty good.

PC 75%

Franglais 1 & 2

ST • 362 • Jennix PD
66 Abbey Road, Strood,
Rochester, Kent ME2 3QB

Parlez-vous Franglais? Well, you probably will when you've finished these two fun disks.

Based on the hybrid language created by Miles Kington, *Franglais* aims to teach you French by making it fun. Impossible? Well, almost, but Franglais gives it a very good go.

Franglais, the language, is a mix of French and English. So, for example, you get sentences such as: "Essayez-vous on the chaise."

Written completely in this language, these disks teach French by gradually introducing more and more French into the language. The only problem I can see is that there might

co p

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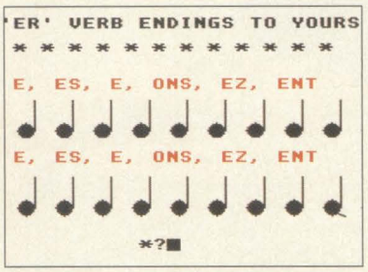
cont. from p112

be some people who are a bit too thick to work out which are the French and which are the English words.

There are also a number of exercises and tutorials in a more traditional style. Thankfully, these are done in a very light and humourous way, with lots of simple, but effective animation and cutesy sound effects.

The first program deals with very simple French, mainly with numbers onze to douze, and a few more widely used phrases such as 'respondez s'il vous plait'. The second gets a little bit more complicated and introduces – shudder – verbs!



French can be fun, honest. *Franglais* uses lots of bright graphics to make it seem that way.

Both disks are undeniably fun, but don't think you're going to be able to order at a french restaurant without extreme embarrassment after having used them. They're more aimed towards swots who want to get a head start in class.

ST 74%

Play It Safe

Amiga • LPD 14 • Déjà Vu Shareware 25 Park Road, Wigan WN6 7AA ☎ 0942 495261

Kids and danger are never far apart. Leave your kid alone in a room with a pair of scissors and the next thing you know, they'll be trying to cut through an electric flex. *Play It Safe* is a colourful and fun game designed to teach kids a few basic rules of safety.

At the beginning there is a short introductory sequence which shows a horde of nasty little monsters entering a safe suburban house and turning the place into a deathtrap by doing such things as leaving the fire without a fireguard, leaving scissors on the floor and placing goldfish bowls on top of the telly. What horrid creatures!

You then have to go around the house and garden, putting right these wrongs. There are five dangers in each room and you have to spot them and click on them with a mouse – the cursor is represented by a rather fetching little teddy bear. When you do, a short message appears at the bottom of the screen telling you why it's dangerous and your Teddy cursor leaps off the screen only to reappear seconds later with a segment of a captured nasty. Find all five dangers and you've captured a whole nasty and can move to the next room (or garden, but let's not be pedants).

Generally, the graphics are very good, but some of the dangers are hard to spot because they have not been very well drawn; the box of matches in the kitchen springs to mind. But some brilliantly dippy alien nasties and the cute but cuddly teddy bear cursor make the game very enjoyable. A large selection of dangers, which can all crop up in any of the rooms in any combination, means that *Play It Safe* also has lasting appeal.

AMIGA 84%

That bear is actually the cursor in *Play It Safe*, just one of the many small but effective touches that make the game a joy for youngsters.

Capitals

Amiga • 1000 • 17 Bit Software PO Box 97, Wakefield WF1 1XX

This game is very simple. But, oddly, it is also very engrossing.

Basically all it involves is naming the capitals of the US states. The program names a state and you have to type in the capital. That's it.

If you get it right, the screen changes to a large map of the USA and the state which you've just named the capital of is filled in, so you learn a bit about the geography of the States as well. Then you go back to the naming screen and try to name another state capital. If you get it wrong, the right answer is displayed and you move on to another state. But don't worry, because you'll get another chance at the ones that got away later on.

Not exactly Earth-shattering, I admit, but it's incredibly addictive. There must be more fun ways of learning about US geography but this still beats poring over an atlas for hours on end any day.

AMIGA 68%

Moonletters

ST • Goodman Enterprises 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent

Blasting aliens and learning to spell at the same time! Can't be bad, can it? *Moonletters* is the perfect game for all those little blighters who need something a little more exciting than *Janet and John*.

The game is set on the moon, which seems to have become infested by a breed of letter-carrying green monsters. You've got to exterminate these nasty creatures, but you can't do it in any old order, oh no. You've actually got to spell out words.

There are six levels and the rules change as you progress through them. In each there is a panel which the displays the word you have to spell, say 'apple'. So, on the easiest level a whole group of aliens appears, each bearing one letter of the word APPLE. You simply have to shoot them in the right order before a time limit is up.

As you progress, though, things become more difficult. First the aliens start to appear one at a time and a few extraneous aliens, bearing letters not in the target word, might be thrown in. If you shoot these, then you lose lives. In later levels still, the aliens begin to start firing back at you if you don't hit them in time.

The game is supported by some splendid graphics; even the menu screen is well-designed. There are some simple but witty touches of animation, especially when you kill an alien. The game is mouse-controlled and you line up your sights on-screen via a pretty impressive targeting arrangement. The sound effects also add to the quality of the game.

Highly recommended.

Disguise an English lesson as a shoot-'em-up. That's the way to trick the kids learning without them realising.

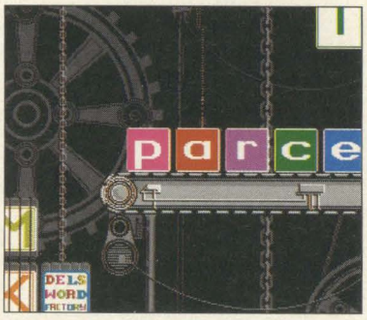
ST 90%

The Word Factory

Amiga • LPD10 • Déjà Vu 25 Park Road, Wigan WN6 7AA ☎ 0942 495261

Word Factory is a simple spelling game for five- to eight-year-olds. You have to put letter blocks onto a conveyor belt in the right order to spell the word selected by the computer.

You select the letters you want with



***Word Factory* – churn out those letters and load up the waiting lorries outside.**

cont. p

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THE KID PROGS COLLECTION

All available from Risetime
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***Kidprogs* is a whole of programs for the ST aimed at the four- to ten-years age group. All written by someone who wishes only to be known as DA Brumleve – but who makes sure that his name is pretty prominent the main screen of each program – they range from the worthy but a bit dull to the inspired. Each *Kidprog* disk contains either two or three programs, and there's usually at least one of them that makes the disk well worth buying.**

KidShapes 2

ST • E1-ST • Risetime

A simple picture-making program in which you have to insert coloured shapes into an 8x10 grid. Just click on a shape from the selection on the left of the screen – there are 28 to choose from and range from boring old squares to more exciting things like diagonal stripes – and drag it into position on the grid .

You have to colour up your blocks before you slide them into position and this is done by simply clicking on the colour you want from the palette of – don't hold your breath – eight at the top of the screen; all the blocks then change to the selected colour. It's that easy.

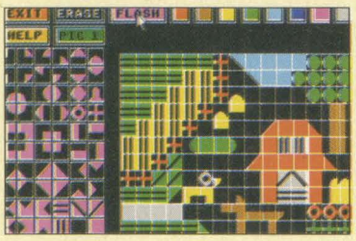
Very easy to use, *KidShapes* is bright and colourful and makes pleasing bleeps and boings when you select or position blocks. It might be a bit difficult for young children to draw anything recognisable on such a blocky grid, but for producing pretty patterns its enough fun to keep them quiet for a while.

ST 78%

KidShapes

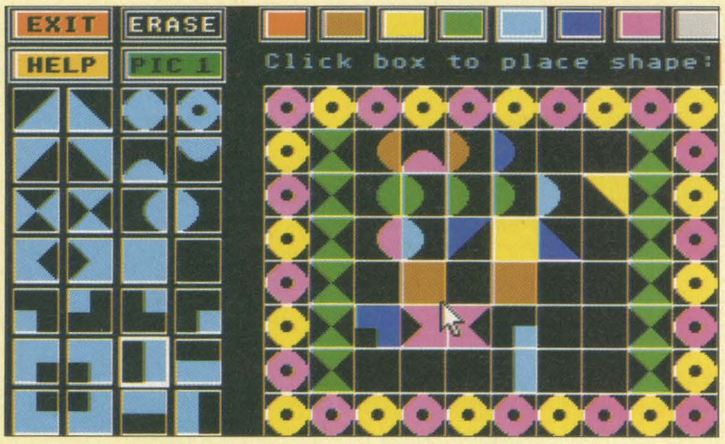
ST • E1-ST • Risetime

While the numeral in the name might make you think that that this should be a simpler version of the other program, the reverse is true. Based on exactly the same principle as *KidShapes 2*, this program has an amazing 60 shapes – some blocks even have two lines, gasp – and an 11x15 grid.

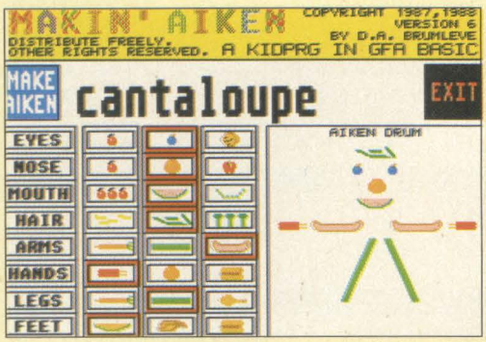


For some reason the more complicated version of *KidShapes* is actually the original!

There's even a 'Flash' facility which will turn a certain block on and off repeatedly. This allows for very simple animations, such as an eye winking. In fact, it's almost up to Spectrum standards really.



There are a number of colouring in programs in the collection, and *KidShapes 2* is one of the best. Simply clock on the shape you want from the selection on the left and drag it on to the grid.



***Makin' Aiken* – your chance to build a man out of food. Just what you've always wanted to do.**

Again, it is very simple to use, but this time quite complicated and effective pictures can be created, which can then be saved to disk. Great fun, and with a lasting appeal.

ST 85%

Makin' Aiken

ST • E2-ST • Risetime

Based on the nursery rhyme, *Aiken Drum*, this program turns the idea that he was made of cheese on its head and lets you choose what kind of food he was made out of.

You have a choice of three culinary delights for each feature. So, for example, you can choose whether you want his eyes to be made from blueberries, cookies or cherries, his hair to be broccoli, celery or french fries.

The graphics are bright and clear and the text is bold and easy to read. Again, it is very simple to use and young kids could be left alone with it quite happily for a while. However, it is a bit limited and I doubt whether many kids would want to play it repeatedly. And parents be warned: it does plays an incredibly irritating version of the *Aiken Drum* song after every choice and will probably drive you completely mad after a while.

ST 70%

KidGrid 2

ST • E2-ST• Risetime

Another drawing program, this time aimed at a slightly higher age group than the *KidShapes* programs, around 10- to 12-year-olds I would guess. This time the grid is divided up into hundreds of triangles, each of which you can fill in with the colour of choice, and you have an amazing 14 from which to choose.

There is also a 'drag' option which means that when you hold down the right mouse button and drag the mouse across the grid, every triangle it crosses will be filled with the selected colour.

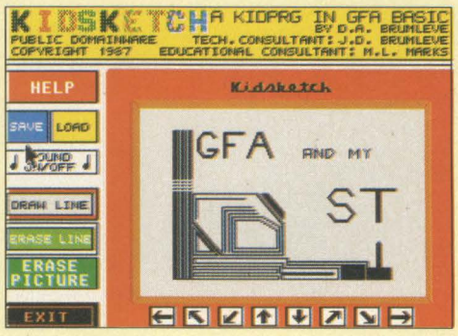
The main drawback is that there is a very slow reaction time when you click the left mouse button, so you have to be a little bit patient, which, unfortunately, most young kids are not very good at.

ST 68%

Kidsketch

ST • E2-ST • Risetime

A version of *Etch-A-Sketch* – remember that? – which has a selection of arrows beneath the main screen as opposed to the traditional two knobs. The arrows point up, down, left, right and all the diagonals in between. Click on arrow, hold down a mouse button and a line is drawn in the corresponding direction on screen.



***KidSketch* is basically a computer version of *Etch-A-Sketch*, with a few alterations and improvements.**

It has the advantage over real *Etch-A-Sketch* system in that you can stop drawing a line and start somewhere else on the screen. However, there is no facility available for drawing curves – you can't click on two arrows at the same time.

OK as far as it goes, but a bit limited. Basically, not as fun as the real thing.

ST 72%

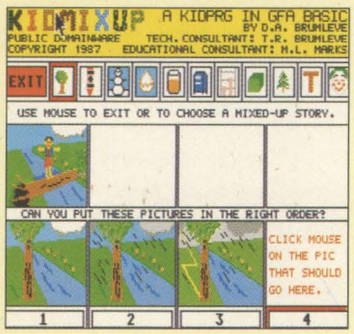
KidMixup

ST • E3-ST • Risetime

One for the young Sherlock Holmeses out there, *KidMixup* tests powers of deduction.

You choose one of 11 stories . The program then presents with four pictures which should follow on from one another to form a cohesive narrative. Unfortunately, the nasty computer has gone and mixed the whole lot of them up. Isn't that always the way with this type of program?

You have to click on the pictures in the order you think they should go. Get it right and the screen flashes up Wow ! in the top set of boxes (the exclamation mark conveniently filling up the last box) and then you can choose another story and start all over again. Get it wrong and you are told to, "Do it over." Do it over? What kind of the language is that to be teaching our kids?



***KidMixup* is all about deduction. Can you work out what order the pictures go in?**

Though in the same style as the the other games in the series, the graphics here are rather poor and some younger children might have problems working out what is going on in a few of the pictures, let alone put them in the right order. Still, good fun though.

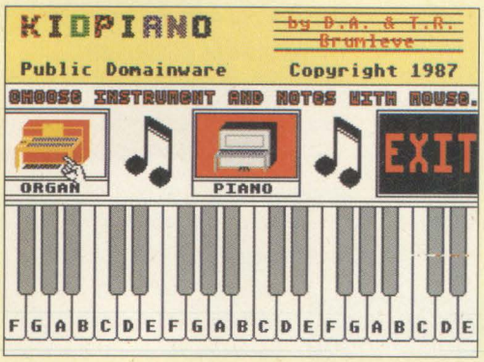
ST 60%

KidMusic

ST • E3-ST • Risetime

Simply click on one of eight icons to hear an intensely irritating version of a nursery rhyme. Very young kids might find it moderately distracting for about 10 minutes or so, but anyone over the age of 12 years in the vicinity might be tempted to put an axe through the screen before that.

ST 40%



***KidPiano* sounds nothing like a piano or an organ, but this doesn't really detract from the fun.**

KidPiano

ST • E3-ST • Risetime

A keyboard is represented on screen and you simply point at a key with the cursor and the note is played. There is a choice of piano or keyboard sound, but there is very little difference between the two, and the piano sounds more like an organ than the organ option does (what that sounds like is not for a family magazine).

But that doesn't' really matter, as *KidPiano* is still great fun to use and the name of each note is written on the keys for that little bit of extra educational value.

ST 75%

KidGraph

ST • E3-ST • Risetime

KidGrid revisited, with squares instead of triangles and, thankfully, a much more sensitive reaction to clicking.

ST 70%

KidPuzzle

ST • E4-ST • Risetime

Do not play this game unless you want severe wrist-strain.

All you have is a vast, blank grid with a certain number of secret key squares. Randomly click on the grid and, if you're lucky enough to hit one of these secret squares, a lot of other squares of the same colour will miraculously become visible. But it doesn't stop there; you have to carry on randomly clicking until you have hit all the secret squares and have revealed a stunning picture about, oh, some 20 minutes later.

There are 11 grids to choose from, but most kids will probably have given up by about the fifth. Basically the whole exercise is a bit pointless and frustrating. The pictures revealed at the end are hardly worth the effort. Only for children who have mastered the art of patience – all four of them.

ST 62%

KidStory

ST • E5-ST • Risetime

KidStory is quite simply brilliant. Simple, but brilliant. Brilliantly simple, in fact.

Yep, I liked *KidStory*.

The program is based on the story of *Little Red Riding Hood*, but it enables you to make a few alterations and transform the story into your own literary masterpiece.

Before the story commences, you have to choose a number of objects from a selection displayed on-screen. These range from traditional fairy tale ware, such as, believe it or not, red riding hoods, to bathtubs, floppy disks and MacDonald french fries. All of these choices will appear in the final story, and not always in the way you might be expecting.

So, for example, if you choose a baseball cap instead of a red riding hood, the story becomes 'Little Baseball Cap'. This approach leads to some seriously hilarious scenes; one version I 'wrote' climaxed with the woodcutter eggbeating the wolf to death. Brilliant.

ST 90%

KidABC

ST • E5-ST • Risetime

Remember that annoying *ABC* song that used to crop upon *Sesame Street* all the time? The one where they pronounced 'z' 'zee'? Well that forms that basis of this game in fact that's about all there is to it.

You have to type in the alphabet. Get it in the right order and the notes to the song chime away happily and the letters appear in large, colourful text on-screen. Make it all the way to 'zee', sorry 'zed', and the song plays again.

***KidABC* requires you to type in the alphabet in the right order... what is that last letter?**

A cheat sheet is available – the alphabet displayed along the bottom of the screen.

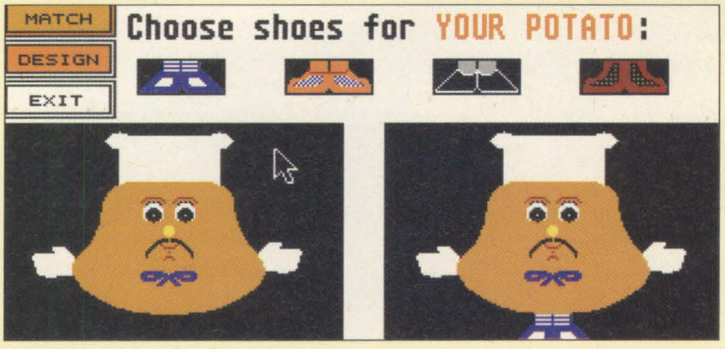
ST 72%

KidPotato

ST • E5-ST • Risetime

Dressing up potatoes is what this game is all about. Two windows appear on screen, one with a naked potato, the other with one dressed by the computer. A selection of eyes, mouths and legs is then presented to you and you have to choose which ones match those on the computer's potato. There is also an option to design your own potato, you lucky things.

ST 80%



***KidPotato* – dressing up potatoes might sound a bit odd, but that's what this game is all about. Either design your own or challenge the computer. Less messy than using the real things.**

cont. from p114

a joystick, which should make the game a little more appealing to youngsters who would rather be playing the latest shoot-'em-up; it makes it seem more like a 'real' game.

When you have spelt a certain number of words correctly they are loaded into a waiting lorry, and you've completed the game.

The graphics are superb, the *Word Factory* itself realised in splendid form, all massive cogs, large, bolted metal and bold colours. It really gives the game a bit of atmosphere – an element usually lacking from most children's games. There is also some very effective animation and wonderfully clunky sound effects.

Two drawbacks. There is no real sense of progression of competition – perhaps a time limit would have given the game a more lasting appeal . Also, if you place one block incorrectly on the conveyor belt and then you realise your mistake, then there's no way to correct it.

But *Word Factory* remains a superior piece of childrens' public domain software.

AMIGA 78%

Colourspace

ST • Llamasoft, 49 Mount Pleasant, Tadley, Hants ☎ 0734 814478

Jeff Minter is a weird old hippy who has a 'thing' about llamas and sits on a hill in Wales all day long, contemplating the universe. Which explains a lot, including *Colourspace*.

Totally cosmic, man.Just look at all those hypnotic patterns. Must've been something I ate or *Colourspace*.

Colourspace is a light synthesiser. Erm, that is, it creates patterns of light in response to your, er, movements. Oh dear, this is going to be more difficult to explain than I first thought...

Let's start with the basics. Your computer has a blank screen, with nothing more on it than a dot (technical term: cursor). By combinations of moving the mouse around and pressing various keys, changing patterns of light are created on the screen. The mouse movements control the actual cursor and the keyboard modifies the way it behaves: mirror images, trails that gradually disappear, that sort of thing. Anyway you press the keys, move the mouse and watch the screen. Not a lot of fun on its own, but the idea is that you turn the lights down low the music up high, and produce an ever-changing aura of light.

Sounds daft, doesn't it?

But we thought we'd give it a go anyway. (Nothing ventured, nothing gained.) We shut the blinds, turned off the lights, borrowed a 'Floyd LP from our friend 'Moonchild', and prepared ourselves for an 'experience'.

It's weird, but it kind of works! At first, you don't have a clue what all the keys are supposed to do. (Read the documentation? Pah!) But press them all a lot anyway, wiggle the mouse around to the music, and, it's like awesome, man! Totally mindblowing!

Watching the patterns swirl around the screen in time with the music is quite hypnotic. It's relaxing, and it's quite easy to while away an hour or two getting mesmerised. The only problem is that you end up with eyes like dinner plates and can't blink for the next couple of days.

Colourspace is probably not the sort of thing you'd find essential for everyday use, but certainly has plenty of novelty value. It's like this ultra-vivid Technicolor explosion, so loosen up, man, and mellow out for a totally awesome experience!

Colourspace is Jeff Minter's second shareware release, the first being *Llamatron* (reviewed in the games section, this issue). It's the prequel to *Trip-a-tron*, which is like this, only much more so. Registering (it only costs a fiver) gets you a properly printed manual.

ST 88%

Work and Play

Amiga • Deja Vu 25 Park Road, Wigan WN6 7AA ☎ 0942 495261

A very colourful compilation this one, featuring two marvellous and one not-so-marvellous game aimed at the five- to eight-year-olds.

Click Clock is all about telling the time. This ancient art has come a long way from *Play School* clock. For one thing, we now have to deal with digital displays as well as the good old big and little hands.

***Snakes and Ladders* without the snakes and ladders. You have to answer maths questions instead.**

Click Clock deals with both forms of telling the time. The screen shows two clock faces: one digital one, analogue. At the top of the screen a cat sleeps next to large chunk of cheese to one side and a mouse peers longingly from the other.

You choose which clock you want to use. You are then asked set it to a certain time. If you get it right, the mouse at the top of the screen makes a dash for the cheese and manages to swipe a bit. Get it wrong and the cat wakes up and, in a nifty bit of animation accompanied by a strange swishing sound effect, chases the mouse away.

Telling the time has never been such fun. Great sound effects and animation beats the *Play School* clock any day.

All the sound effects are a bit odd, actually, but they don't detract from the overall quality of the program. Bright and colourful, with witty animation, it is very simple to use and an ideal way to help teach your kids how to tell the time.

Times Tables is an incredibly impressive-looking board game affair. It is very similar to snakes and ladders, except that when you land on a hot square you have to answer a multiplication question. The playing pieces include an aeroplane and a boat, and all are accompanied by the relevant sound effects as they move along. Very colourful, but perhaps a bit hollow.

The final game, *Shopping*, is very much a disappointment by comparison. It involves adding up the prices of goods you buy at a shop. Very static and very bland, it rather lets the disk down.

AMIGA 75%

Colouring Book

Amiga • LPD1 • Déjà Vu 25 Park Road, Wigan WN6 7AA ☎ 0942 495261

Keeping children amused is a full-time job. Getting them to learn something new and be happy at the same time is an impossible task, yet this is what *Colouring Book* sets out to do.

Colouring Book is what it says: a computerised version of those outline drawing books that you'll find down your local newsagent. It's intended for pre-school children and helps them vent their artistic talents without making a mess of the dining room table.

The program automatically loads when placed in the drive, bypassing Workbench and the CLI, making loading very easy – an important factor for a program aimed at so young an age group.

When loaded, you are presented with a control screen which contains ten boxes, each a different colour. Pressing the left mouse button while the pointer is positioned over one such box changes the colour. It also produces a silly sound effect, such as a

cont. p1

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OPD110 Amiga Chart 5 (Touch Me & Eve of the war)
OPD112 Madonna Spanky (Good)
OPD113 P.E Demolisher Mega Utility Disk (209 utilities)
OPD115 Invaders Rippers (Small selection of Rippers)
OPD116 Uedit (Public domain word processor)
OPD198 Walker Demo 1 (Very good animation) (*)
OPD199 Walker Demo 2 (Same as above but better)
OPD200 Safe Sex Demo (Brilliant samples on this one)
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OPD228 Kim Wilde Slideshow
OPD229 Games Disk (Pac Man etc).
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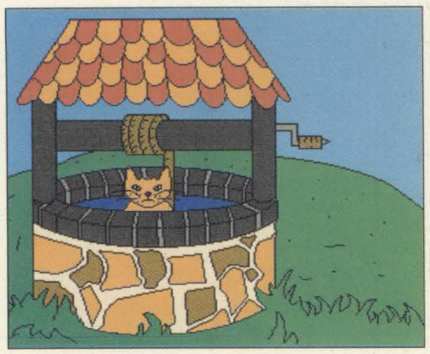
cont. from p118

train whistle or a duck quack, which will no doubt delight the kids. Pressing the right mouse button switches between the colour selection screen and the drawing.

Colouring the pictures in couldn't be simpler. Simply click on an area of the picture and it's filled with the currently selected colour. Once you're tired of painting everything orange, the colour selection screen is merely a mouse-click away.

Colouring Book comes with six drawings from nursery rhymes. Favourites such as *Hickory Dickory Dock* and *Doctor Dolittle* are among the selection. *Colouring Book* uses standard .IFF files so you can add drawings to the disk when junior is tired of the six supplied. It also means that coloured in pictures can be loaded into an art package such as *Deluxe Paint* and printed out to give your kid something to treasure forever. (Just as long as you have a colour printer, that is!)



***Colouring Book* supplies the line drawings and the colouring tools. You supply the artistic talent.**

While you are colouring, music plays in the background. It's fine for kids, but adults may find the repetitive jingle more then annoying. Thankfully, it can be turned off by clicking on the appropriate box.

When the masterpiece is finished, your nipper will no doubt want to store it safely away for future use. All pictures can be saved to disk. Options for load, restore pic. and save coloured picture are given, and these are printed as text in boxes. Icons would have been friendlier – most adults have no idea what restore pic. means, let alone a young child. Another problem is that the program uses the AMOS file requester with normal AmigaDOS file handling. This is too cumbersome for tiny tots. An adult would have to help with loading and saving pictures.

All in all, *Colouring Book* does what it sets out to do. But it's a very simple program and, with just six pictures, it may not hold a child's attention for very long.

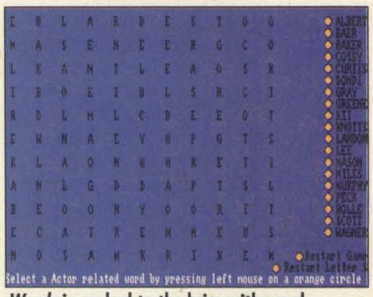
AMIGA 62%

Words!

Amiga • GTS, Unit 1, Dippen, Brodick, Arran, Scotland KA27 8RN

Words! is a two-disk package from George Thompson Services PD. The disks are well assembled and easy to use. There is quite a number of bits and pieces spread over the supplied disks, all related to word games. The most notable pieces of software on disk one of the package are *Reader*, *Cross* and *CWP*.

Reader is a very useful utility which finds any words that can be formulated from the user's choice of letters. For example if the given letters were 'AG.E.PL', where '.' can stand for any character, the program would result in PLACE, AGES, PLEASE, PAGES ... etc – all words longer than four letters in its vocabulary. Invaluable for anagram solving.



***Words* is packed to the brim with word games. It'll keep you amused for hours.**

Cross is a crossword creator. It enables you to manually enter words to create a crossword which is then printed out via the PAR: parallel printer device (serial support is not implemented). Unfortunately the entering of words is rather slow, so the package also comes with a pre-processor which is able to accept an ASCII text file to facilitate faster automatic processing.

CWP, by comparison, is a crossword game. It comes with crosswords of varying difficulty, from easy to devilishly hard. There's even a hint feature for those really hard ones... The input interface is intelligent enough, enabling you to type sideways or downwards, directly to the grid, and the clues automatically change as the cursor is moved on-screen using arrow keys or the mouse.

Disk two contains two programs, *Scrazzle* and *Disearch*.

Scrazzle is another game based on the crossword theme. This time you are presented with a crossword grid, and random letters which you have to place on the grid. It requires quite a bit of thought to achieve a high score by producing legal words on the grid.

AMIGA 80%

Greater Powers?

Two programs with three things in common: they are both about dates and both have obviously had rather a lot of effort put into their programming, as the mathematics involved must have been horrendously complicated, and each is, well, a much of a muchness.

Biorhythms

Amiga • LAO 71 • Strictly PD 11 York Place, Hotwells, Bristol

Some people believe that we all have sets of biorhythms that run throughout our lives. There are three of them – emotional, financial and health – and they are supposedly set in motion the day you're born. They run in waves, and each has its own set frequency so that, for example, you will have regular high and low periods in your financial affairs. And, logically, there will be times when all three waves reach their peaks simultaneously and, boy, are you going to have a good day then.

This program calculates biorhythms. You just put in your date of birth and then whatever other date you want – today's is usually a good bet – and the program shows you your biorhythmic waves for a month from that date. Good for planning when to ask for that bank loan, or when to ask that particularly fanciable type from accounts out, if you actually believe in all this stuff, of course.

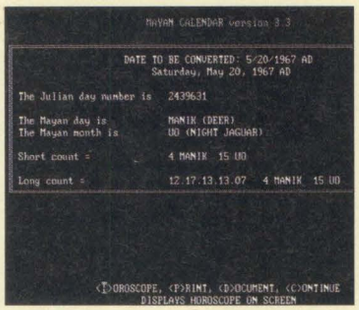
And that's about it really. There is no more. OK, so it's a laudable piece of programming, but the author could perhaps have made his offering a little bit more exciting in its visual presentation.

AMIGA 61%

Mayan Calendar

PC • 4223/PE • Softcell Services Shareware, 25 Maywood, Brynna Pontyclun CF7 9PZ

Mayan Calendar has a document file that makes *War and Peace* look like postcard. It goes into great depth after a graphicless screen about the format of the Mayan calendar, the history of the Mayan civilisation, the development of the modern calendar, theology, astrology, the development of the program, the maths needed to calculate the program and much more, all as boringly as possible. Which is a shame, because without reading the file and learning a bit about the Mayan calendar, the actual program makes very little sense.



***Mayan Calendar* is an impressive piece of programming, but very dull.**

You boot it up and are asked to put in a date. You do so, and are presented with a table showing you what that date would be in the Mayan calendar. There is also a lot of other wibble about long and short days and the Julian calendar, which makes no sense unless you have grappled with the Doc file.

The most interesting part of the program is that it also delves a little into Mayan astrology, so you can find out which Mayan star sign you were born under.

Apart from that, *Mayan Calendar* is really for committed historians and horologists only.

PC 55%

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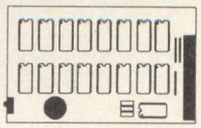

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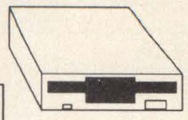

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Amiga • 1006 • 17 Bit Software
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Amiga • 1006 • 17 Bit Software
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Amiga •GD1245 • Goodmans
Terminally dull program which takes the patience of a saint to use and delivers very few results. Boring to look at at too.

Rebus Writer 54%
ST • E2-ST •Rise Time
Picture writing program. You know, picture of an eel with a '+ F' next to it to mean 'Feel'. Pictures are so poor it's near impossible to work out what the messages mean.

Robot Attack 82%
ST • Goodmans
A platform game in which you destroy robots with your mathematical skills. Very bright and colourful, with long-lasting appeal.

Golf Recorder 79%
Amiga • 1093 • Amiganuts
Keep all your golf scores on your computer and work out your average scores. Very good for what it is. Snazzy digitised images of professional golfers jazz things up.

17 Bit Educational 68%
Amiga • 985 • 17 Bit Software
Compilation of programs aimed at secondary school levels. Very science-based, it is full of gravity simulators, weather forecasters and things like that. Uninspired grapically.

Fun Time 78%
Amiga • L8 & L9 • PD Soft
Two-disk compilation packed with colourful programs for five to eight-year-olds. Spelling, matching shapes, all the usual stuff, but done done with a bit of style.

PeopleTree 70%
Amiga • 923 • Amganuts
Genealogy program that allows 500 entries, with space for long comments. Very friendly to use if a bit limited.

Thingamajig 78%
Amiga • LPD4 • Déjà Vu
Very simple-to-use colouring program in which the shapes fit certain areas of the screen to form a very bright picture. Fun sound fx.

10-Pin Bowling Statistics 70%
Amiga • 834 • Amiganuts
For, would you believe, recording your 10-pin bowling scores? You can create logs and files for either individuals or teams. Needs two drives.

Astrology 60%
Amiga • 883 • Load Crest
Hi-res graphics, so you'll need a multi-sync monitor. Two drives required. Does this sound good? Well it isn't. Poor documentation means that unless you're already well into astrology, it'll be totally beyond you.

EZ Art 90%
ST • ART42C • Floppyshop
Great art package which is almost up to commercial standard. Friendly, colourful and fully featured. Recommended.

Michael's Big Adventure 82%
ST • Tom Zunder, 23 Rosedale Way, Bramley, Rotherham S66 OLE
Superb interactive adventure for kids with deliberately, but appealingly naff graphics. Send £3 to the above address and you definitely won't be disappointed.

Educational PD Games 80%
ST • Disk 10 • Trust PD
Three simple mouse-operated games. Time telling, maths and map reading (that's a new one) all covered.

Star 2000 69%
ST • GD960 • Goodmans
Do you like seeing stars? Then this is the program for you. But only if you're not too fussy, as it's all a bit hum-drum and unexciting, if competently programmed.

Cal 20 75%
ST • 1204 • South West Software Library
This can work out how many days are left in the year and will produce a calendar for any year you request. Exciting stuff, eh?

Big Top Fun 78%
Amiga • LPD29 • Déjà Vu
Three more educational programs for the under tens, this time based around circus performers. Three levels of difficulty for each game. Very colourful and should keep the kids happy for many hours.

Video 1.35 78%
PC • WIN073 • Omicron
Video tape catalogue system. Stores titles, keywords, actors, positions on tape, etc. Easy to use and good at what it does. Worth a look if you keep on losing your sticky labels.

Recipe Maker 70%
PC • WIN062 • Omicron
Stores recipes, helps you plan your weekly shopping list and makes converting weights easier. A bit daunting at first, so not recommended for the PC illiterate.

PC-Sketch 69%
PC • 1297 • Shareware Marketing
Full-colour drawing program with lines, boxes, circles, fill, copy and all the other usual tools. Good for the budding PC artist, if a bit limited. Remarkable fact: it was wrtten by a 14-year-old.

FUN2LEARN1 65%
Amiga • Amiganuts
Maths and spelling programs for the very young. Fun animations liven it up, but the games themselves are a bit limited.

Maths Bunnies 78%
Amiga • 1146 • Amiganuts
Maths lesson disguised as an arcade-style game. Brilliant fun for the under tens.

Classroom Maths 45%
Amiga • L14 • PD Soft
If you're going to try to encourage kids to learn maths, the last thing you want is a program based on a teacher in class, but that's exactly what this is. Naff graphics, boring and dreadful use of speech chip.

Concentration 76%
Amiga •986 • 17 Bit Software
Very colourful combination of *Match Pairs* and the TV quiz show *Catchphrase*, but luckily there's no sign of Roy Walker. Turn over cards to find pairs and reveal a hidden word. Great for four- to eight-year-olds.

PD Questionnaire

Who invented the flush toilet? How long is a piece of string? And just what did you make of the first issue of Public Domain?

Well, what did you think? We'd like you to tell us what we can do to improve the magazine. Fill in this questionnaire, bung it into an envelope and send it to us. You may leave out your name and address if you like, but everything will be treated in the strictest confidence.

After we've collated all the information from the forms, we'll chuck the whole lot into a hat and dish out some goodies to the first ten we pluck out. It'll be a mystery prize. (A mystery to us as well as you!)

You've nothing to lose and everything to gain. So snip out the form (or photocopy it) and send it to:

***Public Domain* Questionnaire,**
30 Monmouth Street, Bath BA1 2BW.

Name .....
Address .....
.....
.....
.....
Phone Number .....

1 How old are you?

Under 16 ..... ❒
16 – 20 ..... ❒
21 – 30 ..... ❒
31 – 50 ..... ❒
Over 50 ..... ❒

2 What sex are you?

Male ..... ❒ Female ..... ❒

3 What is your annual income?

Less than £3,000 ..... ❒
£3,001 – £6,000 ..... ❒
£6,001 – £10,000 ..... ❒
£10,001 – £15,000 ..... ❒
£15,001 – £20,000 ..... ❒
More than £20,000 ..... ❒

4 Which computer do you own?

Amiga .....500❒ ..1000❒ ...1500❒ ....2000❒
ST .....ST❒ .....STE❒ ...Mega❒
PC .....XT❒ ....286❒ .... 386❒
with .....CGA❒ ....EGA❒ ....VGA❒ ....Mono❒

5 And how much memory does it have?

.....512K❒ .....1Mb❒ .....4Mb❒
.....640K❒ .....2Mb❒ ....Other❒ .....

6 Which of the following peripherals do you own/intend to buy for your machine?

Printer .....Own❒ .....Intend to buy❒
Mouse .....Own❒ .....Intend to buy❒
Hard drive .....Own❒ .....Intend to buy❒
Modem .....Own❒ .....Intend to buy❒
External Drive .....Own❒ .....Intend to buy❒

7 How much, roughly, do you spend a month on:

Hardware .....
Commercial Software .....
PD & Shareware .....

8 Where do you obtain the majority of your PD and shareware?

PD/Shareware library ..... ❒
MODEM/Bulletin board ..... ❒
Friends ..... ❒
Magazine coverdisks ..... ❒

9 How many advertisments in *Public Domain* have you responded to?

None ..... ❒
Up to five ..... ❒
More than five ..... ❒

10 How do you rate the magazine in terms of value for money?

Excellent value ..... ❒
Good value ..... ❒
Reasonable value ..... ❒
Poor value ..... ❒

11 Which computer magazines do you buy? Please give a rating out of 10

Public Domain ..... /10
..... /10
..... /10
..... /10
..... /10
..... /10
..... /10

12 How much did the rewiews sections appeal to you?

Utilities & Programming ..... /10
Games ..... /10
Business ..... /10
Demos ..... /10
Home & Educational ..... /10

13 Give a rating out of 10 for the features in this issue:

Disk ..... /10
What is PD? ..... /10
MED ..... /10
Comms ..... /10
Addware ..... /10
The Dark Side ..... /10
Printers ..... /10
PD programmers ..... /10
Tex ..... /10

14 What did you think of the issue overall?

..... /10

15 How many people, including yourself, have read this copy of *Public Domain*?

.....

If you have any comment how *Public Domain* can be improved, please attach an extra sheet. Oh, and thanks! PD

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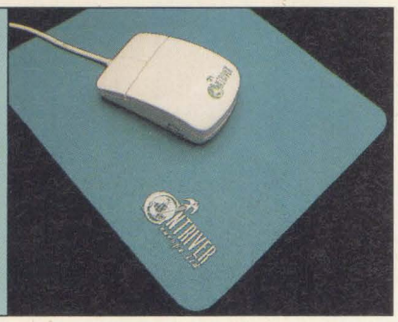

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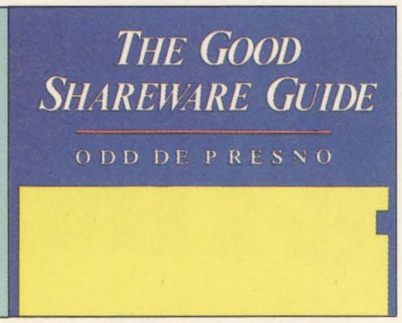

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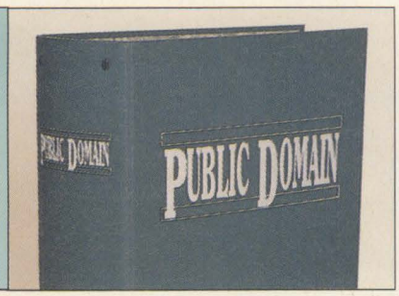

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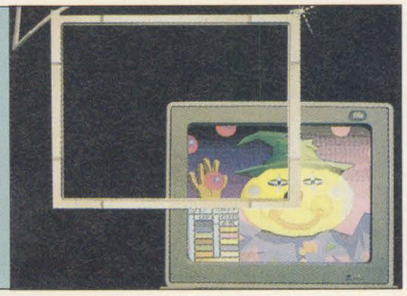

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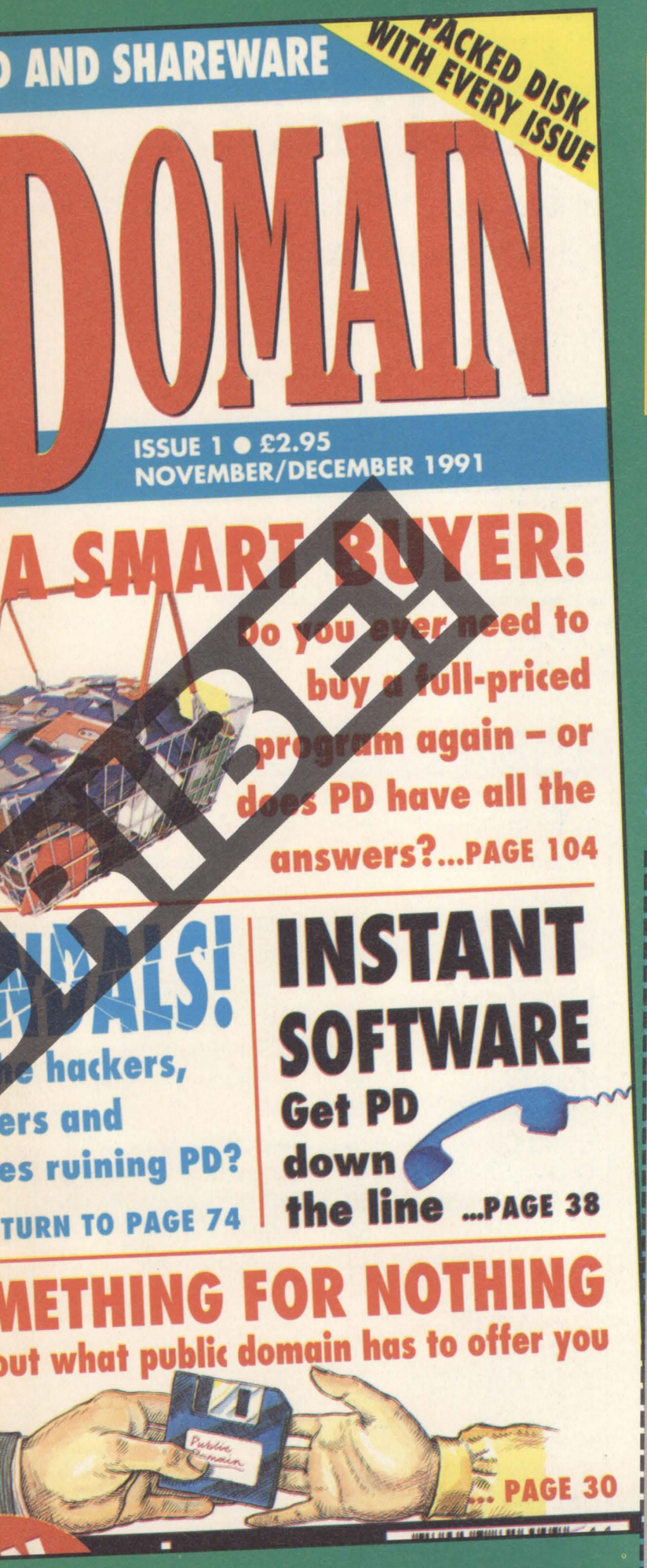

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This is the end

The whole *Public Domain* team breathe a collective sigh of relief to be putting the magazine 'to bed' at long last. (Or will be, just as soon as this last page gets sent to the printers!) Before we go, to laze around for the weekend and do anything but thing about magazines, we must pass our special thanks must to the following two people :

Jacquie 'Spazza' Spanton for additional design

Karl 'Karloid' Foster for additional production/subbing

without whom this issue could never have got to the printers 'on time'.

Also, we missed a few people from the front of the magazine. Credit goes to:

Photography:
Ashton James ☎ 02216 6686

Illustration:
Jolyon Webb ☎ 021 357 9232

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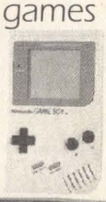

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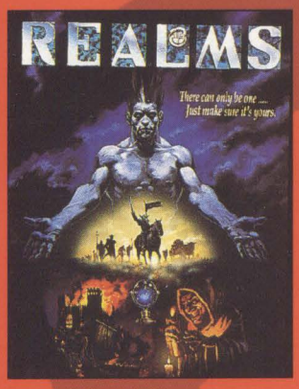

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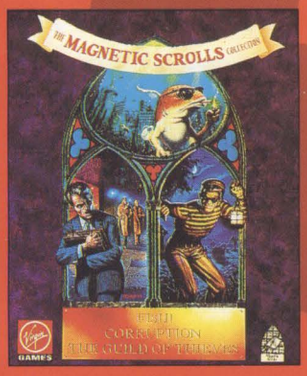

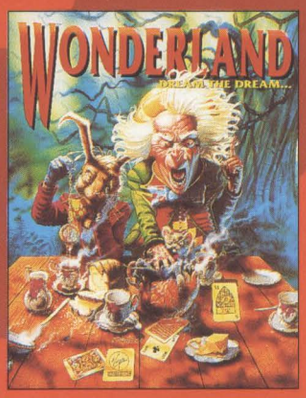

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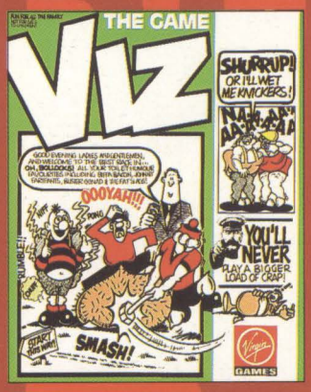

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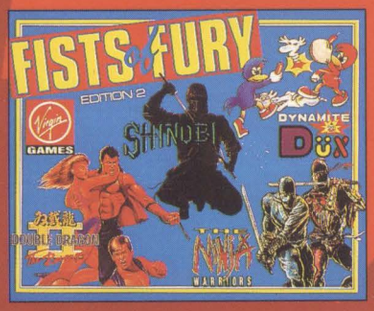

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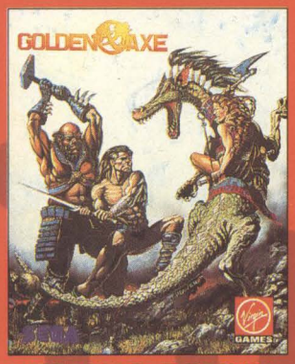

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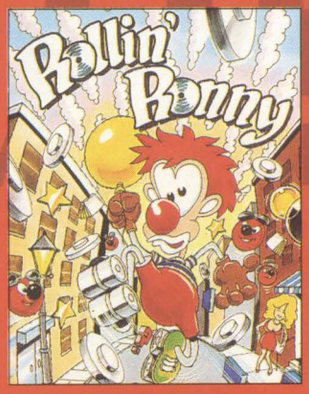

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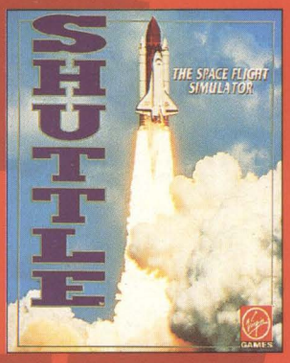

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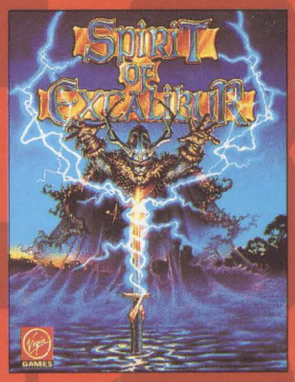

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Phew! That's the very first issue of *Public Domain* over with. Time for a well deserved rest (not too long – we've got to get cracking on issue 2!)

Public Domain – the magazine that gives you more PD news, reviews and cockatoos than any other mag! (We lied about the cockatoos, but we couldn't think of anything that rhymed. Sorry!)

NEXT ISSU

Whatever next, eh? Well, we don't know *exactly* what will b in issue 2 o *Public Domain*. But we do know that it'll be: Packed wit reviews of PD and shareware; Crammed full of fabulous features; Bursting a the seams with all th latest news and info; On your newsagent' shelves from 5th December 1991! Make a dat in your diary NOW!